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ABSTRACT

This is a report on a four and one-half year study of adolescent health, based on data collected through personal interviews with and medical examinations of 752 youth, 12-17 years of age, in a representative cross section of households in Harlem. Almost all were black and this report focuses on them alone. On the assumption that many health needs among adolescents in Harlem are not being met, and that innovations in providing care will be required to meet those needs, the three major objectives in this study were: (1) to assess the physical and emotional health status of adolescents in Harlem; (2) to determine their utilization of available health care services and their needs for medical care; and, (3) to make recommendations for more effective provision of health services. Personal interviews were conducted in the adolescents' homes by specially trained survey interviewers who were matched to their respondents for both sex and ethnicity. The interviews dealt at length with adolescents' current health status--physical and emotional; utilization of medical and dental services; personal health practices; and attitudes toward health and toward the medical care they had received. All young people who were interviewed were offered a free comprehensive medical examination. ["Appendix E" may not be legible in MF or HC reproduction due to size of the print.] (Author/JM)

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ADOLESCENT HEALTH IN HARLEM

by Ann F. Brunswick
Eric Josephson

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Ann F. Brunswick
Eric Josephson

* Names of the medical examining staff, medical consultants at Harlem Hospital and the interviewing staff appear in Appendix A.

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Chapter I

The Report in Brief

This is a report on a four and one-half year study of adolescent health, based on data collected through personal inverviews with and medical examinations of 752 youths, 12-17 years of age, in a representative cross section of households in Harlem. Almost all were black and this report focuses on them alone. Although the study addressed itself to adolescents in one urban area, some of their health problems, health behavior, and needs for medical care are likely to be shared by other young people.

What distinguishes the study is that (a) it was based on a cross section of adolescents living at home—not hospital patients; (b) it dealt with a broad array of health matters; (c) it used a variety of research techniques—e.g., personal interviews and medical examinations; and (d) it provided a service—a free medical examination with referrals for follow-up care. It is hoped that findings from this study will be useful to those responsible for improving the delivery of health services to adolescents.

Background and Objectives of the Study

There is growing concern about certain health problems presented by adolescents—such as drug abuse—and with means for dealing with those problems. However, information is lacking on their general health status, behavior and attitudes, and medical care needs. Particularly lacking is information about young people from a community such as Harlem, where many live in poverty. Data on children and youth from national surveys show significant class and ethnic differences in access to health services, e.g., in visits to physicians and dentists, and health insurance coverage, with black youths at a distinct disadvantage. But how does this apply to young black people in one urban community?

On the assumption that many health needs among adolescents in Harlem are not being met, and that innovations in providing care will be required to meet those needs, the three major objectives in this study were (1) to assess the physical and emotional health status of adolescents in Harlem; (2) to determine their utilization of available health care services and their needs for medical care; and (3) to make recommendations for more effective provision of health services to them. The issue may be put briefly as one of finding ways to get health services to adolescents and adolescents to health services.

Procedures

A sample of young people 12-17 years of age was drawn from a larger community household health survey conducted by Harlem Hospital's Department of Patient Care and Program Evaluation as part of its affiliation with Columbia University. Over a period of two years (1968-70), and after obtaining parental consent, personal interviews were completed with 752 adolescents in Central Harlem, or 83 per cent of those assigned; medical examinations were completed with 556 youngsters, or 74 per cent of those who were interviewed; information about school performance was abstracted from nearly 600 school records.

Personal interviews were conducted in the adolescents' homes by specially trained survey interviewers who were matched to their respondents for both sex and ethnicity. The interviews dealt at length with adolescents' current health status—physical and emotional; utilization of medical and dental services; personal health practices; and attitudes toward health and toward the medical care they had received. All young people who were interviewed were offered a free, comprehensive medical examination that was designed and conducted especially for this project in space provided by the Ambulatory Care Service at Harlem Hospital. Examination sessions usually were held one afternoon a week after clinic hours and were staffed by specially recruited physicians, nurses, and other health workers on the staff at Harlem Hospital. The medical examination included a complete physical check by a physician, an examination of teeth and mouth by a dentist, tests of blood pressure and visual acuity, a chest X-ray, a skin test for tuberculosis, blood tests, urinalysis, and measurements of growth and development.

In addition, information was abstracted from school records concerning days absent, school marks, special disabilities, and standard reading achievement test scores—to provide the basis for an analysis of the relationship between health problems and school achievement.

The Sample

Nearly 90 per cent of the sample were black, the remainder from Spanish-speaking families. Adolescents 12-15 years old were represented in both years of the study; 16-17 year olds were included in just the second study year. The emphasis in this report is on the 542 black youths 12-15 years old, since their numbers are large enough for reliable statistics regarding their health problems and health behavior. The smaller group of 16-17 year old black youth, with a larger sampling error, is analyzed separately for age gradients in health problems and needs for care.

In the group of 12-15 year olds, boys outnumbered girls in the ratio of 55 to 45. They were more often younger (12-13) than older (14-15), in the same ratio. Nearly half of the households in Central Harlem in which they lived were on welfare; a similar proportion were without an older male or male head. Their households were predominantly Protestant in religion. More than three-quarters of the youths were born in New York City and nearly the same proportion had mothers who were born in the South. On the average, five or six people were living in each household.

Participation in Examination

The rate of participation in medical examinations was high, especially among the 12-15 year old youths: 78 per cent of those interviewed appeared for examination. Both boys and girls showed a drop in participation rate by

ages 16-17. The decline was sharper and appeared earlier among boys, decreasing from 83 per cent at age 12 to 48 per cent at age 17. Among girls, the rate of participation was 79 per cent at age 12 and 61 per cent at age 17. There were no notable socio-economic differences between those interviewed and those examined. The high rates of participation achieved in this study are important both methodologically and substantively. Data are more representative when fewer cases are lost. In addition, high participation rates suggest that adolescents and their parents in this community are interested in health and in using health services.

Such rates also indicate what careful planning can achieve in gaining youngsters' participation. Important here was the signed parental consent obtained in the home before the examination. This eliminated the need for parents to accompany their children to the examination. A consideration of paramount importance was allowing for flexibility in scheduling and rescheduling youngsters' examination appointments.

Health Status

More dental problems were noted than any other kind of health problem and they are treated separately in this report. Apart from the dental, the health problems that Harlem youngsters reported most frequently in their *interviews* were: trouble seeing, frequent colds, repeated headaches, nervous or emotional problems, stomach pains, skin problems, and pains in legs and/or arms—in that order. Girls reported more health problems than boys. Among those given *medical examinations*, the conditions observed most frequently were vision and eye disorders, skin problems, and nervous and emotional problems—in that order. Again, somewhat more girls than boys were considered by physicians to have significant health problems. There was high correspondence between what adolescents reported about their own health and what physicians observed upon examining them. Exceptions were subjective conditions, e.g., headaches, which were more likely to be reported in interviews, and conditions that can be determined only by medical tests and professional diagnosis, e.g., heart and blood pressure problems, which were more likely to have been observed by physicians. This is shown in Table I-1, which summarizes the major non-dental health problems reported in interviews and observed in the medical examinations.

Detailed reports were obtained about some of these problems during personal *interviews*. Almost one in five reported some trouble seeing the blackboard in school; better than one in three had eyeglasses and more than half of those with eyeglasses indicated that they do not wear them as much as they are supposed to. The result of visual acuity testing at the medical *examination* indicated that one-quarter of the adolescents were functioning with distance acuity of 20/30 or worse.

Table I-1—Major Health Problems (In Order of Frequency)*

Black Youth 12-15 Years	
Reported in Interviews†	**Observed in Examinations‡**
1. *Trouble seeing:* reported by one in four; girls more than boys.	1. *Vision and eye problems:* observed in one in five; no sex difference.
2. *Frequent colds:* reported by one in five; girls more than boys.	2. *Upper respiratory tract disorders:* observed in one in six; no sex difference.
3. *Repeated headaches:* reported by nearly one in five; no sex difference.	3. *Heart or blood pressure problems:* observed in one in six; no sex difference.
4. *Nervous or emotional problems:* reported by one in six; girls more than boys.	4. *Skin and complexion problems:* observed among ten per cent; girls twice as often as boys.
5. *Stomach pains:* reported by one in six; girls more than boys.	5. *Nervous and emotional problems:* observed in one in twelve; girls more than boys.
6. *Skin problems:* reported by one in seven; girls four times as often as boys.	6. *Nutritional problems, chiefly obesity:* observed in seven per cent; no sex difference.
7. *Pains in legs and/or arms:* reported by one in seven; no sex difference.	7. *Neuromuscular or musculoskeletal disorders:* observed among seven per cent; no sex difference.
8. *Speech problems:* reported by one in eight; no sex difference.	8. *Lung and bronchial disorders:* observed among five per cent; no sex difference.
9. *Repeated sore throats:* reported by one in eight; girls more than boys.	9. *Blood problems, chiefly anemia:* observed in four per cent; girls twice as often as boys.
10. *Repeated nose bleeds:* reported by one in ten; no sex difference.	10. *Urinary problems:* observed in four per cent; girls three times as often as boys.
11. *Long-lasting cough:* reported by one in ten; no sex difference.	11. *Speech problems:* observed in three per cent; no sex difference.
12. *Asthma or wheezing:* reported by one in ten; no sex difference.	
13. *Vomiting:* reported by one in ten; girls more than boys.	

* Dental problems are not included here.

† Refers to period of one year prior to interview. Since girls reported more problems than did boys, they tend to exceed boys on any one condition. Listed here are health problems reported in their interviews by at least 10 per cent of the black youth 12-15 years of age.

‡ Health problems physicians noted for at least three per cent of the examined 12-15 year olds.

When asked whether they have a "mental or emotional" problem, one in six replied affirmatively. (The medical examination did not include psychiatric tests.)

Regarding growth and development, approximately one-third were observed at the medical examination to be either underweight or overweight. The interviews revealed considerable concern on the part of both boys and girls about their height and weight.

There was close correspondence between the average height reported in interviews and measurements taken at the medical examination: the average height reported by 12-15 year olds during interviews was 64 inches for boys and 62 inches for girls; the medical examination showed boys with an average height of 63 inches and girls 62 inches. Reported and observed average weights were also similar: by their own reports, boys weighed 117 pounds on the average and girls 118 pounds; when weighed at examination, boys averaged 115 pounds and girls 118 pounds.

General health status was appraised in several ways. In the interview, slightly more than one in ten described his own health as "fair" or "poor"; one-third considered their health "very good," and better than half "pretty good."

Among those examined by physicians, approximately one-third were observed to have at least *two* significant health problems (i.e., significant deviations from what physicians considered normal); a similar proportion were observed to be free of any problem.

One in six of all 12-15 year olds reported missing more than two weeks of school because of illness during the previous school year, with a mean number of seven days lost (a figure which is somewhat higher than that reported for a national sample of all American children 6-16 years of age in 1968).

Conceptions of Health and Health Behavior

High rates of participation in the interviews and examinations suggest a substantial degree of interest in health on the part of young people in Harlem. Information obtained during personal interviews about their perceptions of health problems, conceptions of health, and their own health practices leads to the same conclusion. As for adolescent perceptions of the major health problems confronting them and their contemporaries, drug abuse, cigarette smoking, drinking, and unsanitary living conditions (in that order) were seen as most threatening. The first of these, drug abuse, was mentioned as a public health problem by approximately half of all 12-15 year olds.

Questioned about what contributes to good health and what they do to maintain their health, 12-15 year olds most often thought about physical activity and exercise. Underlying many of their replies was a conception of health in terms of bodily appearance, including physical strength and weight. There was also considerable awareness of the importance of diet, cleanliness, and sleep as contributing to good health.

Replies in the personal interview showed that nine in ten believed that being healthy was mainly a matter of "looking after yourself". At the same time, there was a feeling of fatalism regarding illness: three-quarters believed that, no matter what, a person could expect a lot of illness in his lifetime; more than half felt that there was not much a person could do to keep from getting sick.

Approximately one-sixth of all 12-15 year olds in the sample smoked cigarettes, although only five per cent were smoking as much as half a pack daily. (The 16-17 year old youths smoked more: more than half smoked cigarettes, and over one-fifth of these were smoking at least half a pack daily; the 16-17 year old girls were more likely to smoke than the boys, but, among the smokers, boys smoked more cigarettes than girls.) Less than one-sixth of the 12-15 year olds had ever drunk alcoholic beverages. (Among the 16-17 year olds the proportion was approximately one-half—boys considerably more than girls.)

With regard to eating, four in ten thought they ate too much; one in ten not enough. Half of the girls and about a third of the boys reported that they ate more in snacks than in meals. Six in seven adolescents reported that they drank at least some milk daily. Consumption of soft drinks was slightly lower. More tea was drunk than coffee. As to sleeping habits, 12-15 year old youngsters reported an average of nine hours sleep on a weekday night.

Medical Care Utilization

Data regarding the medical care that youngsters in Harlem receive were obtained from the personal interviews. Seventy per cent of the 12-15 year olds said they had visited a physician at least once during the year prior to the interview. They recalled a mean number of 3.1 doctor visits over the year (a slightly higher rate than the 2.8 doctor visits per year that parents reported for white children 5-14 years of age, nationally, and much higher than that reported for nonwhite children). Consistent with their greater number of health problems, girls reported more doctor visits than boys. One-fourth of the Harlem sample indicated that they had a private physician; two-thirds that they had some usual source of care; Harlem Hospital was reported as the usual source of medical care by one-fifth; six in ten had used clinic services there at least once.

Despite what appears to be a relatively high volume of physician visits, many adolescents reported health problems about which they had not seen a doctor. The likelihood of having seen a physician varied widely according to the condition being reported, from four-fifths of the youngsters reporting asthma or wheezing to 28 per cent of those who reported headaches, and 15 per cent of those who felt they had a speech problem. Comparing the frequency of reported conditions with the numbers who said they had seen a physician about those conditions, the major untreated problems were headaches, skin problems, speech problems, repeated sore throats, chest pains and other respiratory problems, repeated nosebleeds, digestive problems, musculoskeletal disorders, neuromuscular disorders, and trouble hearing—in that order.

Most youngsters had a favorable impression of the care they had received, whatever the source. Their general opinion regarding physicians was also positive. Youngsters preferred physicians of their own sex. Only one-fourth of the 12-15 year olds indicated a preference for physicians who specialize in the treatment of teen-agers; they were more likely to prefer a physician who treats the entire family. Nearly two-thirds said they preferred to see a physician in a private office—considerably more than the proportion who actually had access to such care. The reasons most often given were the absence of waiting time, increased

privacy, and being able to spend more time with the physician.

Youngsters reported favorable reactions to the medical examination provided them as part of this project. Examining physicians were perceived as friendly and kind; they explained things, answered questions, and did not rush; and they took a personal interest in the young person and his problems. Examined youngsters also liked the nurses—particularly their friendliness, kindness, and consideration. Least liked in the examination was having a blood test or a needle (a third of the youth mentioned that) and the dental examination, which about 10 per cent said they did not like.

Needs for Medical Care

An assessment of unmet needs for medical care among youngsters in this community comes from the medical examinations, based on the numbers of problems physicians referred for care: half the adolescents had at least one medical problem for which the examining physician made a referral; one-fifth had at least two conditions for which they were so referred. The major conditions which required referral for follow-up care were vision problems (1 in 5 of the examined youths), heart or blood pressure problems (1 in 7), respiratory disorders (1 in 12), nervous and emotional problems (1 in 12), and skin problems (1 in 20).

The need for medical services can also be seen by comparing the ratio of medical problems already being cared for to those referred for treatment. For each medical problem that a physician observed which was already under treatment, there were eight medical problems that required referral.

Among the 556 youngsters examined at Harlem Hospital, a total of 372 referrals were made by the examining physicians (some youngsters were referred for more than one condition) and of this number, 337 referrals were made to services at Harlem Hospital itself. However, only 40 per cent of the appointments for follow-up care were actually kept.

The Older Adolescent

Health problems and needs for health care increased with age during adolescence. Both self-reports and physicians' findings at the examination revealed more health problems among 16-17 year old adolescents than among younger adolescents and more among older girls than older boys. Girls 16-17 years old also needed the most referrals for care.

Sex Differences

Girls have more health problems, according to both their own reports and physicians' observations. Although they reported more physician visits, they still had more unmet needs for medical care than boys.

There was no sizeable difference between boys and girls in general attitudes toward health care, their perceptions of providers of medical care, or their reactions to the medical examination.

Dental Problems and Dental Care

Dental problems and needs for dental care were by far the most prevalent of all health problems presented by young people in this study. Among those examined at Harlem Hospital, almost two-thirds were given only a "fair" or "poor" rating in oral health. Almost nine in ten were given dental referrals for at least one condition, six in ten for at least two conditions, four in ten for at least three conditions, and more than one in ten were given referrals for as many as four different dental conditions. In order of frequency, the conditions requiring referrals were decay (among 8 in 10), oral hygiene (among more than half), gingivitis or periodontal disease (among 4 in 10) and malocclusion (among 1 in 4).

In certain respects, adolescent utilization of dental services was poorer than that of medical services. One-third of the 12-15 year olds reported a visit to a dentist within six months prior to the interview; somewhat more than half had visited a dentist within one year prior to the interview. As to frequency of visits, two-thirds reported that they generally visited a dentist at least once a year, four in ten said they usually saw a dentist twice a year, and seven per cent reported that they had never seen a dentist. Nearly two in five reported having a private dentist; approximately one-third said they had no usual place for dental care.

When questioned directly about their tooth care practices, better than nine in ten said they brushed their teeth at least once a day; half at least twice a day; and five per cent said they did not brush their teeth daily. In response to questions directed at perceptions of dental services, adolescents associated pain with dental care.

Differences between older and younger adolescents in the prevalence of dental problems were contrary to what was observed for medical problems—younger adolescents had more dental problems than older adolescents. Dental problems peaked in early adolescence.

Among 12-15 year olds, boys' dental problems exceeded girls'; but among 16-17 year olds, girls had more dental problems than boys.

Some Implications

These and other findings from the study—details of which appear in the chapters that follow—have numerous implications for the delivery of health care to adolescents. First, the cooperation which young people in Harlem showed, particularly in the medical examination phase of the project, demonstrates their motivation as well as that of their families to get medical care. The fact that younger adolescents were considerably more likely to appear for the examination than older adolescents, although the latter when they did appear presented more health problems, suggests that special efforts should be made to reach young people early in adolescence. Second, comprehensive health services are neeeded to deal with the variety and multiplicity of health problems which adolescents present. Third, the delivery of dental services, in particular, needs to be restructured to deal with problems which are so pervasive in the early years of adolescence.

While Harlem may or may not be typical of other places, we hope that the methods and the findings of this research will encourage similar kinds of studies to be made of adolescents and their health in other communities. The number and kinds of untreated health problems reported and observed in this study point to the need for increased adolescent health services. As these become available, studies such as this can be useful as a base against which changes in physical, emotional, and social aspects of health can be measured.

Chapter II

Background and Objectives

The Problem

The major assumptions underlying this study were that adolescents in Harlem have numerous unmet needs for health care and that innovations in the delivery of care may be necessary if those needs are to be met effectively. A related assumption is that, in any community, deficiencies in health and medical care adversely affect youthful achievement during school years and afterwards.

Before describing the specific objectives and procedures of the study and presenting detailed findings, it is appropriate to review the problem to which it is addressed in the light of what is known about adolescent health in general (not very much) and the health of black children and youth in particular (even less).

Growing interest in the health and medical care of adolescents—here defined as the 12-17 year age group—reflects a number of factors. First, there are many of them. In 1970, there were approximately 24 million in this age group, or well over 10 per cent of the total U.S. population. More important, their social status has changed significantly with prolonged education, delayed entry into the labor market, congregation in age-graded "communities" based in schools, colleges, or even on the streets, and the emergence of their own "sub-culture" and life styles.

Traditionally, pediatric care (at least in hospitals) drops youngsters at age 12, after which presumably they pass into the network of health services for adults. But since they are not yet adults and present some serious health problems which may require special attention precisely because of their ambiguous social status—e.g., drug abuse, psychiatric problems, venereal disease, pregnancies, accidents, suicide—there has been some justification for the attempt to separate adolescents from child and from adult health services. Hence the emergence of a sub-specialty in adolescent medicine (or "ephebiatrics" as it has been called), the establishment of both inpatient and outpatient adolescent units in hospitals and health centers, and even the rise of a Society for Adolescent Medicine (Gallagher, 1966; Garell, 1965; Pediatric Clinics of North America, 1960; Schmidt, 1962; Simons and Downs, 1968).

The rationale underlying this development has been provided by the report of a World Health Organization Expert Committee on Health Problems of Adolescence: "The illnesses of members of this age-group have received considerable medical attention for many years in many countries, but physicians as a whole have not given adolescents the care that they have given to children and adults. Medical students and physicians have been taught less about adolescents than about other age-groups, less research has been carried out on their disorders and fewer facilities have been provided for their care. Yet the future effectiveness of these young people depends in no small part on the care given them during the formative years of adolescence" (World Health Organization, 1965).

In recent years in the United States, this movement has led to the organization of so-called "anti-establishment" clinics for adolescents and youth, which are presumably more compatible with their life styles, and to legislative efforts to lower the age at which youngsters can obtain medical care without parental consent (Minkowski et al., 1971; Smith, 1968, 1969; Pilpel and Wechsler, 1971). As yet, however, health services for adolescents in the United States are fragmented and reach relatively few of those age-eligible, let alone disadvantaged youth (Mayer, 1971).

Related Research

Research bearing directly or indirectly on adolescent health and medical care needs falls into a number of categories. One body of work deals with what adolescents themselves report or, more often, what adults report for them about their health. A second source consists of data from health examination surveys. Another body of research deals with adolescent patients and with what physicians and other health professionals have observed in special populations of adolescents. Still another kind of research has addressed itself to specific health problems of youth, such as mental illness, drug use, suicide, accidents, pregnancy, and venereal disease. Some attention has also been given to the health care facilities which are or should be available to adolescents. Finally—and most pertinent—there are studies of class and ethnic differences in health status, health behavior, the utilization of health services, and the delivery of medical care.

There have been relatively few sample surveys in which adolescents themselves were asked to report on their own health. The reports issued by the National Center for Health Statistics from its Health Interview Survey (with respondents who are at least 17 years of age) present data separately for the 5-14 and the 15-24 year age groups, thus combining children and younger adolescents in one group and older adolescents and young adults in another (National Center for Health Statistics, 1970a, 1971a). The Health Examination Survey of 12-17 year olds also included self-administered questionnaires on health behavior; however, as yet no findings have been reported (National Center for Health Statistics, 1969).

When information becomes available from the National Center for Health Statistics' Health Examination Survey of 12-17 year olds, for the first time there will be national data on the physical state and "verbal, perceptual, and social skills" of a national sample of adolescents. This survey provided a partial model for what was undertaken in the medical examination of adolescents in Harlem. Other investigations of adolescent health which rely on the examination technique have usually been based on selective rather than on representative populations.

An earlier study by colleagues at the Columbia University School of Public Health was based on secondary analysis of data from a city-wide sample survey of patients visiting the outpatient departments of all 15 New York City

municipal hospitals in 1964-65. Apart from pregnancies, the major health problems presented by the young people in this survey were dental problems, injuries and accidents, skin disorders, vision problems, and nutritional problems (Simons and Downs, 1968).

Other studies in the field of adolescent health have also been based either on observations of youngsters receiving treatment from private physicians or in hospitals (Deisher and Mills, 1963; Gallagher, 1966; Garell, 1965; Nolte, 1965; Pediatric Clinics of North America, 1960; Schmidt, 1962; Sklar and Downs, 1966). This, of course, leaves out the presumably larger numbers who have not been treated. Such studies have been unrepresentative in other ways with regard to the populations studied—for example, reports on the health status of young men found medically unqualified for military service, which of course excludes young women (Adolf, 1964; President's Task Force on Manpower Conservation, 1964; Vandow et al., 1967); studies dealing with high school students (Rogers and Reese, 1964); or reports on the health status of youth in job-training programs, who are not likely to be representative of their communities (Eisner et al., 1966; Salisbury and Berg, 1969).

Regarding specific health problems of adolescents and youth, as noted, there is a considerable epidemiological literature on the incidence and prevalence of such problems as suicides, drug abuse, psychiatric disorders, venereal disease, out-of-wedlock pregnancies, accidents, etc. However, the methods of data collection and the age groups studied vary so widely that it is difficult, if not impossible, to generalize from them. To take just one example, it is widely believed that drug abuse is the number one health problem of youngsters in black communities. And yet, so far as we know, there are no reliable data available on the prevalence of drug abuse in any one such community, let alone the nation as a whole. Nevertheless, it is concern about just such problems as these which has stimulated interest in adolescent health and improving the delivery of medical care to adolescents.

Relatively little is known, however, about the health care facilities which are available to adolescents in the United States. Earlier attempts to survey those facilities, either in one city (Simons and Downs, 1968) or nationwide (Garell, 1965), could not have anticipated either the changing legal status of young people seeking medical care or certain innovations in the delivery of that care which have taken place in recent years and to which we have referred earlier.

So much for research on adolescent health in general. This study addressed itself to the health status and medical care needs of black adolescents in a single community. Relevant to this research are studies dealing with the health status of young blacks and the medical care available to them. What is known? The initial assumption was that young people in Harlem present many unmet health care needs. But it does not necessarily follow that their health status is inferior to that of whites. To be sure, a number of health indicators show a white advantage. Thus, there is evidence of higher black rates for a number of communicable, inherited, and chronic conditions, e.g., tuberculosis, sickle-cell anemia, and hypertensive heart disease (Pettigrew, 1964). So, too, there are significant differences in life expectancy between whites and blacks and not just at birth: at each year between ages 12 and 17 the expectation of life in 1968 was approximately six years higher for white than for nonwhite males in the United States (National Center for Health Statistics, 1971c). However, there are other indicators which produce a picture of black advantage over whites (Cornely, 1970).

Data are lacking—national or local—on the health of youngsters in the 12-17 year age group which would make it possible to compare the health status of and medical care received in different socio-economic and ethnic groups. As noted earlier, the reports issued by the National Center for Health Statistics from its Health Interview Survey present findings for differently defined age groups. Moreover, data from these studies show some inconsistencies as regards socio-economic and ethnic differences in health status and medical care. There are few differences between income or ethnic groups in the number of days lost from school because of illness and injury—a major functional indicator of children's health—among 6-16 year olds. On the other hand, there are *substantial* differences between white and nonwhite children this age regarding the number of physician and dentist visits per year and hospital insurance coverage. Nonwhite children are significantly less likely to have visited a doctor or dentist within a given period and are also less likely to be covered by hospital insurance (National Center for Health Statistics, 1971a).

Do poor people in general and nonwhites in particular tend to under-utilize health care services? A number of investigators have argued that this is the case and that such behavior is related to a "culture" of poverty (and lack of future-orientation) which is incompatible with modern medicine or with preventive health behavior (Rosenstock, 1969). The evidence by no means suggests that poor people in our society are more negligent in this respect than the affluent. Relevant here are reports on cooperation in, and attitudes toward, health examination surveys. In Cycle I of the U.S. Health Examination Survey of adults, the participation rate for all eligible persons was 86.5 per cent, substantially higher than rates reported in earlier studies. This may have been due partly to the novelty of the methods used in the survey and to the fact that examinees were transported to the examination sites by survey personnel. Particularly worth noting is that cooperation was higher among nonwhites than among whites and higher among young adults than among the elderly; however, there was only slight variation by family income (National Center for Health Statistics, 1964). Even higher participation rates were achieved in Cycle II of the U.S. Health Examination Survey of children 6-11 years of age. In that survey (which was conducted during school hours by special arrangement), an overall response rate of 96 per cent was achieved, with nonwhites again cooperating more than whites, boys slightly more than girls, and children in the lowest income group showing the highest cooperation rate (National Center for Health Statistics, 1967).

No less important than health behavior—as exemplified by differential rates of cooperation in health examination surveys—is the structure of ghetto medicine, i.e., the mismatch between the needs of poor blacks and the health services available to them in their communities and the attitudes of health professionals toward the poor (Norman, 1969). But what is known about health care in such communities has little to do directly with adolescents.

In short, although there is growing interest in adolescent health and health care, there is as yet little information available on a nationwide or other representative basis regarding the age group to which this study addressed itself, let alone data on black youth. Nor is much known about the most effective ways of delivering needed health care to urban black youth—i.e., should it be age-segregated as the movement for adolescent medicine suggests, or integrated with comprehensive care for whole families? The study reported here is therefore unique in focusing on the health problems of a cross section of adolescents in an urban community as well as in the kind of community with which it deals; it is also unusual, we believe, in addressing itself to the problem of how best to deliver preventive care in such a community.

Objectives

The objectives of this study in Harlem were:

- to determine the health status of a cross section of adolescents in the community;
- to assess their needs for health care—met and unmet;
- to make recommendations concerning improvement in the delivery of health care for youngsters in this age group.

The findings presented in subsequent chapters of this report are addressed to each of these objectives.

The selection of Harlem as the site for this project needs little justification. Its social problems are fairly well-known: high rates of unemployment and dependency, juvenile delinquency, drug abuse, premature births, deteriorated housing, etc. In such a community—and more precisely that part of it known as Central Harlem, which is almost entirely black—it seemed reasonable to assume that young people (as well as children and adults) present many unmet needs for health care.[1] Furthermore, while the youth of Harlem had been studied before, as in HARYOU-ACT's 1965 survey of adolescent social values and behavior, there had been no overall assessment of their health.

In the mid-1960's an unusual opportunity presented itself to study adolescent health in Harlem. Under the contractual program of affiliation worked out between the New York City municipal hospital system and medical schools in the city, Columbia University—i.e., its medical center—became affiliated with Harlem Hospital, a municipal institution and the major provider of hospital care in that community. Part of the affiliation contract called for an evaluation of health care needs and patient care in Harlem to be undertaken by the School of Public Health, including a continuing household sample survey of the community's health, which has to date accumulated 9,000 interviews with Harlem residents and obtained from them information about 23,000 residents.

The original plan for the adolescent health study was to draw on this community population survey over a period of several years and conduct personal interviews with a subsample of approximately 2,000 young people 12-17 years of age living in these households; comprehensive medical examinations would also be offered to all youngsters in the sample whose parents gave their consent. Procedures for interviewing and examining youngsters had been pretested during 1967 in a smaller sample survey of adolescent health in Washington Heights, an ethnically mixed community adjacent to Harlem (Brunswick, 1969).

But certain modifications in the original study design needed to be made. First, because of an organized protest during the initial stages of the study, certain areas of questioning were omitted, i.e., those dealing with drug use and with violence (Josephson, 1970). Second, this protest raised questions as to whether the study could be conducted successfully. The original plan for a study of 2,000 adolescents in all parts of Harlem was modified to include a sample of approximately 750, almost all of them black, living in Central Harlem.

Other limitations of the project should also be noted. The reduction of the sample meant that few youngsters of other ethnic groups residing in that part of Manhattan served by Harlem Hospital could be included. It also meant that 16 and 17 year olds were not included during the first year of the study, only in the second; hence this report deals largely with a two-year sample of 12-15 year old black youth in Central Harlem. There is as yet no comparable information on youngsters in other kinds of communities—white or black—although in due course, when data become available from the Health Examination Survey of 12-17 year olds, it will be possible to make some comparisons between these Harlem findings and data from a nationwide sample of youth.

Even with these limitations, the findings presented in this report are useful as measures of the major health problems of urban black youth and even more important, as basic to planning ways of providing them with medical care. This was no mere academic exercise, but rather a combination of research and the delivery of care in a community where health problems proliferate. There is already evidence regarding the impact which poor health has on disadvantaged youngsters' school achievement (Birch and Gussow, 1970). Much remains to be done if such obstacles are to be removed. The work reported here is intended as a contribution to that effort.

Chapter III

Concepts and Procedures

Research methods were designed to meet three requirements of this study: a) to investigate many different dimensions of adolescent health; b) to do this in a nonpatient cross section of adolescents; and c) to provide a service in addition to collecting systematic information about adolescent health. To meet these requirements with due consideration for reliability and validity of measurement, a combination of techniques was employed: a personal interview, a medical examination (with referrals for treatment where needed—the service component), and an abstract of official school records.

Conceptualization of Health

Although there are many difficulties in "operationalizing" a broad approach to health such as the World Health Organization's, with its statement regarding physical, emotional and social "well-being," all three of these dimensions have been included among the aspects of adolescent health studied in Harlem.[1] More specifically, the focus was on current health status, defined to include conditions that youngsters reported having during the year prior to their interview or at the time of their medical examination. Furthermore, the study was concerned with both "subjective" and "objective" measures of health. Indeed, one of the purposes of the study was to evaluate the degree of agreement between what adolescents themselves reported about their health and the presumably more objective observations provided by physicians or available in official school records. The match between these different sets of data may, of course, vary among adolescents and according to particular health conditions. Finally, an essentially functional approach to health was selected, taking into consideration how youngsters feel about their health, the way they perform, and how, according to significant others—such as parents, teachers and physicians—they are reported or observed to be performing.

Similar considerations have entered into the assessment of adolescent needs for health care. Here, too, the study was concerned not only with what conditions physicians observed as requiring medical care but also with what youngsters themselves reported about their utilization of available health services and their own perceptions of what they needed. To answer questions as to how, when, where, and by whom adolescent health services might best be delivered in this community, consideration was given both to youngsters' general attitudes toward medical care—which reflect their prior experiences—and to their reactions to the comprehensive medical examination which they experienced in the course of this project.

Relations with the Community

As noted earlier, opposition to the project in its early stages jeopardized its continuation. Consequently, careful attention needed to be given to the involvement of community representatives in an ongoing relationship with the project. How was this done? In March, 1968, the Harlem Health Council (a voluntary body of individuals and agency representatives with an interest in health) formed an *ad hoc* advisory committee to alert project staff members to health problems of particular interest to the community.

In addition to periodic formal meetings, there have been numerous contacts between individual members of the advisory committee and the project staff over the years. Suggestions by committee members were incorporated in revisions of the personal interview schedule. From the outset, this committee has been particularly concerned about how to implement findings from the study in health services for adolescents.[2]

The Personal Interview

Personal interviews were conducted with 752 adolescents in a cross section of households in Central Harlem. These interviews averaged an hour and a half and were conducted by specially trained interviewers matched to their respondents by sex and race.[3] A structured and largely precoded interview schedule of 126 questions was prepared especially for this study (Appendix E). A longer version of this interview schedule had been pretested in 1967 with 122 adolescents of similar age in Washington Heights (Brunswick, 1969).

The following areas of questioning were included in the personal interviews with adolescents:

Physical health,

a. Salience and awareness of health and health problems
b. Personal health practices, including smoking and drinking
c. Self-rating of health
d. School absences caused by illness
e. Limitations on other activities caused by health problems
f. Sensory defects
g. Chronic ailments and conditions
h. Teeth and dental care
i. Accidents and injuries
j. Utilization of medical services, including usual source of care, recency and frequency of doctor visits (for medical and dental care, separately); health checkups; treatment received for specified conditions; hospitalizations, with special attention to Harlem Hospital
k. Attitudes and preferences regarding doctors, dentists and nurses
l. Sleeping patterns
m. Eating patterns

Emotional health,

a. Emotional problems and care received for them

b. Psychosomatic symptoms
c. Fears and worries
d. Mood and affect, including thoughts about death
e. Self-esteem

Social health and related matters,
a. Educational achievement, aspirations and expectations
b. Occupational experiences, aspirations and expectations
c. Aspirations and expectations regarding marriage and child-bearing
d. Satisfaction with peer relationships
e. Relations with family (amount of time spent with them, punishment, freedom and autonomy)
f. Leisure time activities
g. Participation in group and community activities
h. Time orientation
i. Other psychosocial attitudes (sense of personal efficacy, indicators of alienation)

Personal characteristics,
a. Age, sex, ethnicity
b. Religion and religiosity
c. Geographic mobility
d. School and/or work status

Before a youngster was contacted to participate in the study, the interviewer obtained written consent from the parent or guardian for the interview, the medical examination at Harlem Hospital, and exchange of information with school health personnel. A 10 to 15 minute interview was conducted with the parent to obtain his or her report of that youngster's health. Arrangements were then made to interview the adolescent alone, using the structured interview schedule described above. At the conclusion of the adolescent's interview, the interviewer explained the medical examination and made an appointment for him to appear at Harlem Hospital.

Selected data from both the parent and adolescent interviews were forwarded to the hospital prior to the adolescent's medical examination.

The Medical Examination

Through arrangements with the Ambulatory Care Service at Harlem Hospital, free comprehensive medical examinations were provided adolescents in the Medical Clinic of the Service on given weekdays (usually Monday; Wednesday if needed) starting at 4 P.M. *after* regular clinic hours. The examinations were conducted by a team of physicians, dentists, nurses, technicians, and other health workers representing various services at the Hospital. Examinations lasted about three hours. In all, 61 examination sessions were held at Harlem Hospital over the two years of the study, and 556 adolescents from Central Harlem were examined there. An average of eleven youngsters were examined at each session.

The main purpose of these medical examinations was to provide an objective picture of adolescents' health status and of their general physical development. In accordance with the service goals of the project, youngsters were given referrals for further care according to their needs.

The examination included a complete physical check by a physician; an examination of teeth and mouth by a dentist; recordings of blood pressure; tests of visual acuity and color discrimination; a chest X-ray; X-ray of wrist to determine bone maturation;[4] skin test for tuberculosis; blood tests (hematocrit, serology, sickling, white blood count); urinalysis; height, weight and skin fold measurements; and a medical history taken by a nurse. Findings were recorded on a precoded form; one copy went into a permanent file on the young person at Harlem Hospital and the other was returned to the project's office for data processing and analysis.[5,6]

The U.S. Health Examination Survey (HES) of 12 to 17 year olds served as the main prototype for this examination. Although an attempt was made to produce some results comparable to those of the HES, the examination in Harlem did not follow that survey completely.[7]

Information from School Records: The School Record Abstract

Authorization was sought and obtained from the Bureau of Educational Research, New York City Board of Education, to contact district Superintendents and school principals to obtain permission to copy information from individual youngsters' cumulative school records. Information was recorded regarding grade placement, absences, marks received over a two-year period, reading achievement test scores, and special disabilities and problems. School abstracts were completed the year after the interview, with information referring to the year of interview and also the year preceding it.[8]

The Sample

The sample of adolescents in this study was drawn from a representative cross section of households in Central Harlem in which adults had been interviewed earlier as part of a larger community health survey. In each year of the adolescent study, personal interviews were completed with 83 per cent of the listed sample, providing a total of 752 interviews. Among 12-15 year olds, the interview completion rate was 84 per cent; among 16-17 year olds, it was 78 per cent for boys and 84 per cent for girls. Details regarding the drawing of the sample and the representativeness of the completed sample are provided in Appendix B.

The sample of 12-15 year old black youth includes boys and girls in the ratio of 55 to 45; the ratio of 12-13 year olds to 14-15 year olds was similar. (Table III-1) This reflects the distribution of the listed sample rather than differences in cooperation. Consequently, when looking at the findings for the total group of 12-15 year old black youth, it should be noted that they are weighted slightly toward boys and toward the younger of both sexes.[9] All analyses have been conducted for the total group and also for boys and girls separately.

Other background characteristics of the interviewed sample are shown in Table III-2. Nearly half of the 12-15 year old youth were living in households receiving public assistance; and half of the families had no older male or male head living in the household. On the average, more than five people (5.5) lived in each household. The households were predominantly Protestant in religion. About

three-quarters of the 12-15 year group were born in New York City; nearly the same proportion had mothers who were born in the South. Forty-one per cent of the respondents' mothers had not continued their education beyond grade school.

Table III-1—Sex and Age Distribution of Interviewed and Examined Samples

	Black Youth 12-15 Years			
	Interviewed		Examined	
Grand total	(542)	100%	(421)	100%
Boys				
12-13	(162)	30	(129)	31
14-15	(135)	25	(97)	23
All boys 12-15	(297)	(55)	(226)	(54)
Girls				
12-13	(133)	24	(104)	25
14-15	(112)	21	(91)	21
All girls 12-15	(245)	(45)	(195)	(46)

Certain data obtained from the youngsters' school records are relevant in describing the sample of black 12-15 year old youths: two-thirds were still at elementary school grade levels (in the eighth grade or lower); almost half had attended at least four different schools in New York City; one in four had some notation in his school record regarding a "special disability," which was likely to be a reading or general learning problem (14%) or a physical health problem (5%) or a behavioral-emotional problem (6%). School records showed a mean of 21 days absent during the preceding school year. Girls averaged 19 days and had fewer absences than boys, who averaged 23 days of absence; older (14-15 year old) boys had more absences than the younger ones (12-13).

Average school marks the year they were interviewed were just below "C"; girls achieved higher marks in school than boys. Both boys and girls showed a decline in school marks with age, the 12-13 year olds achieving higher marks than those 14-15. (This decline continued in the 16-17 year old group.) On standardized tests, three-quarters of the 12-15 year old adolescents were reading at least one year below their actual grade level; 39 per cent were reading at a level three or more grades below their actual school placement.

Table III-2—Background Characteristics of Interviewed Sample

	Black Youth 12-17 Years				
	12-15 years			16-17 years	
	All (542)	Boys (297)	Girls (245)	Boys (52)	Girls (74)
Age by one-year intervals					
Twelve	27%	28%	27%	—	—
Thirteen	27	27	27	—	—
Fourteen	23	23	24	—	—
Fifteen	23	23	22	—	—
Sixteen	—	—	—	44%	41%
Seventeen	—	—	—	56	59
Welfare status					
Welfare	47	47	47	50	36
No welfare	53	53	53	50	64
Mother's education					
Grade school or less	41	39	43	42	32
Some high school	31	31	30	21	26
H.S. completed or more	29	30	27	37	42
Mother's birthplace					
New York City	20	19	21	21	24
South	73	74	72	67	70
Other	7	7	7	12	6
Adolescent's birthplace					
New York City	76	77	74	88	70
South	21	20	22	12	30
Other	3	3	4	—	—
Religious background					
Protestant	81	79	83	75	88
Roman Catholic	17	17	17	21	12
None	1	2	—	2	—
Not specified	1	2	—	2	—
Father or older male present					
Yes	50	49	50	48	51
No	50	51	50	52	49
Mean number in household	5.50	5.52	5.49	5.37	5.18

Chapter IV

Participation in the Medical Examination

Each adolescent interviewed was offered a free medical examination at Harlem Hospital; the objectives and procedures of the examination have been described in the preceding chapter. Altogether 556 adolescents, or 74 per cent of those interviewed, appeared for medical examinations during the two years in which the survey was conducted in Harlem (this figure includes young people from Spanish-speaking families and the 16 and 17 year olds in addition to 12-15 year old black youth).

The relatively high rate of cooperation in the examination has substantive as well as methodological significance. On the methodological side, the issue is one of representativeness: had relatively few youngsters appeared for their examinations, the results derived from them would have limited generalizability. On the substantive side, a project such as this, which includes a free medical and dental examination, has a built-in behavioral measure of what it is trying to study. Participants in the examination may be regarded as the potential consumers of adolescent health care services. The nonparticipants—unless they did not participate because they were already regularly receiving health care—represent the medically hard-to-reach. In this chapter, therefore, data are presented which indicate some of the factors contributing to the relatively high rate of cooperation achieved in the medical examination.[1] The implications for the delivery of medical care to adolescents will also be discussed.

Explaining the Examination

One of the keys to the high cooperation rate in the examination was the care taken in explaining its nature and purpose to the participants and in scheduling appointments with the young people. Each family approached was given a letter explaining the project which was signed by the director of ambulatory care services at Harlem Hospital and by the project director. Each family was also given a printed, illustrated brochure describing the project in general and the examination in particular. The interviewer explained that the family would receive a report about the young person's health (letters with the main findings were sent to the family of each examined youngster); and that a report of the findings would be sent to a physician or clinic designated by the family; and that referral appointments for needed care would be made for the youngster (at Harlem Hospital) if the family wished.

The interviewer also explained that participation would benefit not only that youngster but other young people in the community, because information was being collected in such a way that it could be used for planning health services for all people their age in Harlem. In other words, the appeal was to both personal and community benefit.

Scheduling and Rescheduling Appointments

All adolescents were examined at Harlem Hospital by weekly appointment in a service designed only for youngsters in the sample. Since household interviewing was going on continuously, the logistical problem was to determine the optimum number of adolescents to be examined at each session in terms of resources and costs. Rates at which youngsters appeared for examination were calculated on the basis of the first examination sessions. Separate rates were computed for those appearing on first appointments and on rescheduled appointments. On the basis of these calculations, an estimate was made as to how many youngsters to invite to each session. The examination staff was capable of handling 12 youngsters at each session. Appointments were made for 20 youths per session, on the average. Only once or twice did more adolescents appear than could be examined by the regular project staff; but arrangements had been made for an extra physician and dentist to be on call in the event that such a situation arose.

As Table IV-1 shows, not all adolescents were examined on their first appointment. Indeed, only 70 per cent of the 12-15 year olds who were examined came on their first appointment; 17 per cent were examined on their second appointment; and 13 per cent on their third or a later appointment. Among the 16 and 17 year old boys, even larger proportions required two or more appointments for their examinations. Rescheduling was therefore essential for producing the participation rate achieved in this study. Once an appointment was missed, the household was contacted by phone, or in person if there was no telephone, to determine the reason for failing to keep the appointment and to set another one. Rescheduling continued when subsequent appointments were missed, to the extent that the examination calendar permitted.

Table IV-1—Appointment on Which Examined

	Black youth 12-15			Black youth 16-17	
	All (421)	Boys (226)	Girls (195)	Boys (30)	Girls (46)
Examined on first appointment	70%	67%	74%	63%	80%
Examined on second appointment	17	18	16	20	13
Examined on third or later appointment	13	15	10	17	7

Reminders of Appointment

Before the interviewer left the home he filled out a reminder form for the youngster, indicating the date and time of the appointment. This form explained how to get to the examination site. A day or two before the actual appointment, another reminder was mailed to the family. Whenever appointments were rescheduled, similar reminders were mailed to the youngster.

Age Differences in Participation

Considered here are differences in participation rates within the interviewed sample. During the first year of the study, 81 per cent of all those interviewed (including youths of Spanish background) appeared for their examinations; but during the second year, the participation rate fell to 70 per cent. Approximately half of this difference was due to the inclusion of 16 and 17 year olds in the second year; the remaining difference was due, at least in part, to changes in scheduling procedures. In the second year the sample was larger and, therefore, once an appointment was missed it could not be rescheduled as many times as had been possible the first year.

Table IV-2 shows the rates of participation by sex and age for the two years combined and for each year separately. The participation rate for 12-15 year old black youth decreased from 81 per cent in the first year to 75 per cent in the second year. Participation rates were lowest among 16-17 year old boys and girls. The decline was sharper and came earlier among boys, decreasing from an 80 per cent cooperation rate at ages 12-13 to 58 per cent at ages 16-17. Comparable figures for girls were 78 per cent at ages 12-13 and 62 per cent at ages 16-17. (There is no apparent reason for the sharp drop between the two study years among 12-13 year old girls; this can be explained only as a chance sampling fluctuation.)

Further details regarding differences in participation rates by age are shown in Table IV-3, which compares the interview and examination completion rates among boys and girls in *one-year age categories*. As this table shows, there was little fluctuation in interview completion by age. However, participation in the examination declined sharply as age increased, particularly among the boys. At age 12, a slightly higher proportion of boys than girls appeared for their examinations. Participation among boys dropped after age 12, with another drop occurring after age 16; but it did not decline at all among girls until after age 15. At each age after 12, proportionately more girls participated in the examination than boys. Among boys at ages 12 and 17, the difference was between 83 per cent and 48 per cent; among girls participation declined from 79 per cent at age 12 to 61 per cent at age 17.

Other Demographic Correlates of Participation in Examination

Welfare assistance was used as the major indicator of economic status. There was neither a large nor a consistent relationship between welfare status and participation in the medical examination. Nor was there any relationship between mothers' educational attainment—another major indicator of socio-economic status in a sample where half were living without male heads of household present—and participation in the medical examination. When participation rates were analyzed with respect to birthplace, there were only small differences between young people whose mothers were born in the South and those with mothers born in New York City (Table IV-4). As for the adolescent's own birthplace, while slightly more of the Southern-born youngsters came to the medical examination, the numbers involved are too small to yield a statistically reliable difference (Table IV-5).

Approximately half of the 12-15 year olds in the sample lived in households with no older male. Data concerning the relationship between the presence or absence of an older male in the household and adolescent participation in the medical examination are presented in Table IV-6. While there was almost no difference in the case of boys,

Table IV-2—Rates of Participation in Medical Examination by Sex and Age for Two Study Years (In Percents)*

	Black Youth 12-17 Years		
	Both years	Study year 1	Study year 2
Boys			
12-13 years	80	80	79
14-15 years	72	74	70
All boys 12-15 years	76	78	75
Girls			
12-13 years	78	86	69
14-15 years	81	82	81
All girls 12-15 years	80	84	75
Total black 12-15 years	78	81	75
Boys 16-17 years	—	—	58
Girls 16-17 years	—	—	62
Total black 16-17 years	—	—	60

* Rates of participation are expressed as percentages of those interviewed.

girls in households with an older male appeared at their examination more often than those from households without an older male; this is a statistically reliable difference.

The Problem of Nonparticipation

Twenty-six per cent of all interviewed youths were not examined. Information was collected from those who refused to make appointments (only 26) and about the larger number who failed to keep their appointments. This information was collected by phone and/or personal visit to the household. Altogether, information was obtained about 174 refusals and missed appointments.

In more than one-quarter of the latter cases, the youngster or parent simply forgot or was unable to give any more specific reasons for not appearing at the examination. The next most frequent reason for not appearing was conflict with other scheduled activities (5% were working, 6% had to remain late in school, and a few had some household responsibility that interfered). Even though the

Table IV-3—Completions by Age (Over Two Study Years)

	Black Youth 12-17 Years		
	(No. Listed) (800)	Interviewed (% of listed)	Examined (% of interviewed)
Boys			
12 years old	(95)	87	83
13 years old	(91)	87	76
14 years old	(84)	80	70
15 years old	(82)	83	74
16 years old	(31)	74	70
17 years old	(36)	81	48
Girls			
12 years old	(78)	85	79
13 years old	(80)	84	78
14 years old	(70)	83	79
15 years old	(65)	83	83
16 years old	(34)	88	63
17 years old	(54)	82	61

Table IV-4—Participation by Mother's Birthplace

	Black Youth 12-15 Years					
	Per cent interviewed			Per cent examined*		
Birthplace	Total	Boys	Girls	Total	Boys	Girls
New York City	78	80	76	80	79	82
Southern United States	86	85	87	77	75	80
All other places	83	87	78	71	70	72

* Examined as per cent of interviewed.

Table IV-5—Participation by Adolescent's Birthplace

	Black Youth 12-15 Years					
	Per cent interviewed			Per cent examined*		
Birthplace	Total	Boys	Girls	Total	Boys	Girls
New York City	84	85	82	76	74	79
Southern United States	82	79	84	84	84	83
All other places	95	91	100	61	60	63

* Examined as per cent of interviewed.

Table IV-6—Participation by Presence of Older Male Living in Household

	Black Youth 12-15 Years					
	Per cent Interviewed			Per cent Examined*		
	Total	Boys	Girls	Total	Boys	Girls
No male in household	87	87	86	75	77	74
Male in household	83	84	81	80	75	85

*Examined as per cent of interviewed.

examination was arranged so that written parental consent was obtained beforehand, a substantial number of parents did bring their youngsters to the examination. Eight per cent of those who failed to keep their examination appointments said it was because their parent was not available to accompany them.

Only about 15 per cent of those who failed to come for their examinations could be considered outright refusals: i.e., a parent did not want the youngster to come (6%) or the adolescent himself did not want to come (10%). Among those who were interviewed but failed to make an appointment for the medical examination (there were 13 such youngsters among the 12-15 year-olds), half gave as their reason that they went elsewhere for medical care.

Summary

In an earlier chapter of this report, reference was made to the participation rates achieved in other examination surveys; however, none provides a model for a survey of adolescents in a largely black community. The relatively high rate of participation by adolescents in Harlem may be attributed in part to convenient scheduling and frequent rescheduling of appointments, a personal invitation to appear at the examination, multiple reminders about the examination appointment, and elimination of the need for a parent to accompany the youngster to the examination. Information collected on nonparticipants suggests that further rescheduling at times more convenient for them might have produced an even higher participation rate. The need for flexibility in rescheduling appointments would appear to be one of the major lessons of this experience for those who want to maximize adolescent participation in health services.

An important consideration of a different kind has to do with the characteristics of those who do and do not cooperate in such an examination. It is clear from the data presented here that the most important single factor contributing to participation in the medical examination was the age of the adolescent. There was only a four per cent difference between the proportions of boys and girls who appeared for their examinations; sex, therefore, cannot be considered an important factor. Among 12-15 year olds in Harlem, those participating in the examination represented 80 per cent of the eligible girls and 76 per cent of the boys; among 16 and 17 year olds the rates were 62 per cent and 58 per cent for girls and boys, respectively.

Where in this age spectrum did the decline in participation occur? It occurred earlier for boys than for girls. Analysis of cooperation rates by age suggests that in the 12-17 year age span, 12 is the optimum age at which to involve boys in preventive health programs. Among girls, the decline in participation occurred somewhat later, between ages 15 and 16. This suggests that there is a little more time to bring girls into preventive care programs—that is, up to age 16. But preventive care is always best provided early and girls at age 16 have more health problems than younger girls (see Chapter IX). It is appropriate, therefore, to aim at involving both adolescent boys and girls at the earliest age possible.

Chapter V

Health Status of Adolescents in Harlem[1]

Findings presented here from both personal interviews and medical examinations reveal the kinds and the frequency of adolescent health problems. As in the presentation of other findings that follow, the main focus is on the 12 to 15 year olds who were represented in sufficient numbers and for whom observations were averaged over two years of study.

First to be considered is the prevalence of self-reported and of medically-observed health problems. This will be followed by a discussion of overall measures of health status, including subjective appraisals; a major functional measure of health—reported absences from school because of illness; and an index of health status based on the number of health problems reported and observed.

Prevalence of Health Problems: Reported in Personal Interviews

Through separate sets of direct questions, information was obtained from adolescents on current visual, dental, and emotional problems. Self-reports on other health problems were obtained by means of a long checklist. Dental problems were by far the most frequently reported and observed of all health problems in this sample; hence they are discussed separately in Chapter XII of this report.

In order of frequency, the following are the major health problems, other than dental, revealed through personal interviews (Table V-1):

Vision problems—One-fourth of the 12-15 year olds reported some trouble seeing; among girls the proportion was 32 per cent and among boys 20 per cent.

Respiratory problems—One-fifth reported having frequent colds; among girls the proportion was 26 per cent and among boys 16 per cent. One-eighth reported that they had repeated sore throats. One in ten said they had had chest pains; one in ten reported long-lasting coughs and asthma or wheezing; one in twelve reported sinus trouble; one in twenty reported frequent earaches.

Repeated headaches—This problem was reported by almost one out of five. Although reported by similar proportions of girls and boys, it was the second most frequent of all the problems reported by boys while it ranked sixth among girls.

Nervous or emotional problems—One in six considered himself to have some kind of nervous or emotional problem; among girls the proportion was 23 per cent and among boys 13 per cent.

Stomach pains—These were reported by one in six; among girls the proportion was 21 per cent and among boys 12 per cent.

Skin problems—One in seven of the youngsters reported skin problems; the proportion among girls was 25 per cent, among boys it was six per cent.

Speech problems—These were reported by one in eight; there was no difference in proportion between boys and girls.

Repeated nose bleeds—One in ten reported this problem; the proportion was slightly higher among boys than among girls.

Vomiting—One in ten reported this condition; among girls the proportion was 15 per cent and among boys six per cent.

The foregoing were the health problems most frequently reported by young people themselves. Other problems reported by five to ten per cent of the 12-15 year olds included hay fever or other allergies, shaking or trembling (sometimes regarded as a psychosomatic symptom), shortness of breath without exercise (another psychosomatic symptom), dizziness and fainting, and backaches.

Additional problems reported by fewer than five per cent included certain digestive tract symptoms; hard thumping of the heart (sometimes considered a psychosomatic symptom); deformity or stiffness of extremities, limbs, or back; heart conditions; anemia; bed wetting; and difficult or frequent urination.

Table V-1 lists the frequency with which all of these problems were reported by the total sample of 12-15 year olds and by boys and girls separately. Because girls reported more conditions than boys did, a higher proportion of girls could be expected to report any one condition. The proportions, by themselves, do not indicate how the relative frequency of the problems may differ between boys and girls. But this can be seen in the last pair of columns, which shows the separate rank orders of occurrence among boys and girls.

Prevalence of Conditions: Findings from Medical Examinations

So far this chapter has dealt with what adolescents reported in their interviews about specific health problems. Next to be presented are findings from the medical examinations given at Harlem Hospital to 78 per cent of the 12-15 year olds who were interviewed.[2]

What did the medical examinations reveal? Significant deviations from what the examining physicians considered normal were found in the following general areas, in order of frequency: (Table V-2)

Vision and eye problems—One-fifth of all 12-15 year olds examined at Harlem Hospital were observed as having such problems; boys and girls in similar proportions.

Respiratory tract disorders—This category includes transient upper respiratory infections as well as all other respiratory conditions. One-sixth of the examined sample were observed to have such problems; lung and bronchial disorders were noted among five per cent; there was little difference in occurrence between boys and girls.

Heart and blood pressure abnormalities—Problems in this category were observed in one-sixth of the examined sample; proportions of boys and girls were about the same.

Skin and complexion problems—Problems of this kind severe enough to be noted as significant were observed

in one-tenth of the examined sample; the proportion among girls was twice that among boys.

Nervous and emotional problems—Problems in this area were considered significant among one out of twelve examined youngsters; among girls the proportion was 11 per cent and among boys it was six per cent.

Nutritional problems—Significant and/or treatable problems in this category, chiefly obesity, were observed among seven per cent of those examined; there was no difference in proportions between boys and girls.

Neuromuscular and musculoskeletal disorders—These were observed among seven per cent of the examined sample; there was no difference in porportions between boys and girls.

Blood disorders—Tests for abnormalities in the blood system uncovered significant deviations, chiefly anemia, among four per cent of the examined sample; the proportion among girls was twice that among boys. Blood test findings were suggestive in another sizable proportion who were referred for further diagnostic testing.

Urinary problems—Problems in this category were observed among four per cent of the examined sample; the proportion among girls was three times as great as among boys.

Speech problems—These were observed as significant among three per cent of the examined sample.

Other medical problems regarded as significant by examining physicians but prevalent among no more than two per cent of the examined sample were: mental retardation, menstrual disorders or pregnancy (4% of the girls), other genital or reproductive tract disorders, accidents or injuries, breast conditions, endocrine and metabolic disorders, and hearing difficulties.

The medical conditions listed above were those considered significant by the examining physicians.[3] In some cases the proportion of youngsters observed to have a particular condition was far greater than the proportion for whom the condition was regarded as medically significant. For example, 18 per cent were observed to have facial acne of grade two or higher, 26 per cent of the girls and 11 per cent of the boys.[4] Speech disorders were recorded for 10 per cent of the youngsters, musculoskeletal deviations for 15 per cent, suggestive neurological signs for 10 per cent and disorders of the reproductive system for 8 per cent. The

Table V-1—Self-Reported Health Problems (from Personal Interviews)

	Black Youth 12-15 Years			Rank order	
	All (542)	Boys (297)	Girls (245)	Boys	Girls
Eye trouble	25%	20%	32%	1	1
Frequent colds	20	16	26	3	2
Repeated headaches	18	18	18	2	6.5
Nervous or emotional problems	17	13	23	4.5	4
Stomach pains	16	12	21	7	5
Skin problems	14	6	25	15.5	3
Pains in legs and/or arms [a]	14	12	16	7	8
Speech problems	13	13	14	4.5	10.5
Repeated sore throats	13	9	18	11	6.5
Chest pains	11	9	14	11	10.5
Repeated nosebleeds	10	12	8	7	21.5
Long-lasting cough	10	11	9	9	19
Asthma, wheezing	10	9	10	11	15
Vomiting	10	6	15	15.5	9
Hay fever or other allergy	9	8	11	13	12
Repeated sinus trouble	8	6	10	15.5	15
Shaking or trembling	8	5	10	18.5	15
Trouble hearing	7	4	10	21	15
Shortness of breath	7	6	9	15.5	19
Backaches	7	4	10	21	15
Dizziness, fainting	7	5	9	18.5	19
Frequent earaches	5	4	7	21	23
Heart thumping hard	4	1	8	30.5	21.5
Frequent constipation	4	2	6	27	27
Long-lasting bronchitis [b]	4	3	4	24	27
Indigestion	3	2	5	27	25.5
Bed wetting	3	3	2	24	29.5
Heart conditions	3	2	5	27	25.5
Anemia	2	1	2	30.5	29.5
Frequent diarrhea	2	1	2	30.5	29.5
Difficulty, frequent urination	2	1	2	30.5	29.5
Deformity or stiffness in extremities, limbs, back [b]	2	3	1	24	32

a) Asked only in first study year.
b) Asked only in second study year.

actual proportions judged to be *significantly* deviant (Table V-2) were noticably lower.

Omitted, so far, is one class of physicians' findings—notations about problems referred for further investigation. In these cases, physicians were uncertain whether or not similar deviations would appear on subsequent evaluations, although the findings from this first examination were suspicious. Rather than exaggerate the extent of pathology in the population, these conditions have been excluded from Table V-2; there may be some understatement of the findings when all of these referrals for further investigation are ignored. (Table V-3)

Table V-2—Medical Problems Noted by Physician (from Medical Examinations)

	Black Youth 12-15 Years			Rank order	
	All (421)	Boys (226)	Girls (195)	Boys (226)	Girls (195)
Respiratory tract disorders	22%	20%	24%	2	1
Upper respiratory	17%	16%	17%		
Lung and bronchial	5	4	6		
Vision and eye problems	21	21	21	1	2
Heart and blood pressure abnormalities	17	17	16	3	3
Heart	13	14	11		
Blood pressure	4	3	5		
Skin and complexion problems	10	7	14	4.5	4
Nervous and emotional problems	8	6	11	6.5	5
Nutritional problems	7	7	8	4.5	6.5
Neuromuscular and musculo-skeletal problems	7	6	8	6.5	6.5
Blood disorders	4	3	6	9	8.5
Urinary problems	4	2	6	12.5	8.5
Speech problems	3	2	3	12.5	12
Mental retardation	2	2	3	12.5	12
Other growth problems (skeletal)	2	3	1	9	16
Menstrual disorders and pregnancy	2	—	4	—	10
Other genital and reproductive tract disorders	2	2	1	12.5	16
Accidents or injuries	2	3	1	9	18
Breast conditions	2	*	3	18	12
Hearing difficulties	1	1	2	15.5	14
Endocrine and metabolic disorders	1	*	1	18	16
Hernia	0.5	1	—	15.5	—
Abdominal tenderness and vague signs	*	*	—	18	—

* Less than half of one per cent.

Table V-3—Conditions Referred for Further Investigation (from Medical Examinations)

	Black Youth 12-15 Years		
	All (421)	Boys (226)	Girls (195)
Problem with blood (anemia, etc.)	10%	10%	10%
Urinary problems	6	3	10
Heart and blood pressure abnormalities	4	5	2
Heart	3	4	2
Blood pressure	1	1	—
Respiratory tract disorders	4	3	5
Upper respiratory	*	1	—
Lung and bronchial	3	2	5
Vision and eye problems	1	1	1
Neuromuscular, musculoskeletal problems	1	1	1
Menstrual disorders and pregnancy	1	—	2

* Less than half of one per cent.

Correspondence in Prevalence Between Self-Reported and Medically Observed Conditions

These distinctions between observed, significant, and referred conditions are important in considering the degree of correspondence between what youngsters themselves reported about their health and what their medical examinations revealed. The techniques of the interview and the examination were bound to touch on differently defined, as well as differently measured, dimensions of health. Thus, headaches, which many adolescents reported, would seldom be noted in a medical examination unless the physician considered them as a symptom of some other condition; conversely, tests performed during the examination produced findings about conditions youngsters could not be aware of unless they had such tests, e.g., hypertension, blood conditions, and urine problems. Nevertheless, there was a high degree of correspondence between the two sets of findings, especially in regard to the overall ranking of health problems. Insofar as the medical examinations may be regarded as validations of the personal interviews, they suggest that adolescents are dependable reporters of their health problems.

General Measures of Health Status

Consideration will now be given to how youngsters appraised their general state of health, to limitation in their activities because of health problems, and to the *number* of health problems which they reported and which physicians observed.

One-third of the 12-15 year olds reported in their interviews that their own health was "very good"; just over half said it was "pretty good"; one in ten said it was "fair"; and one in fifty regarded their health as "poor." There were no significant differences between boys and girls in these general appraisals of their own health.

Three-quarters of the girls and two-thirds of the boys considered their own health to be on a par with others their age. About a fifth considered themselves healthier than others and fewer, about one in ten, to be less healthy than others.

During interview, about one in six reported as many as three days absence from school because of illness during the prior month, with an average of 1.3 days lost in a school month because of illness. Taking the year as a whole, one in six reported missing more than two weeks of school because of illness, with a mean number of seven days lost. This figure is somewhat higher than that reported for a national sample of 6-16 year olds in 1968 (National Center for Health Statistics, 1971a).[5]

About one in ten claimed that his health status limited what he could do in school; considerably fewer (4%) reported that ill health limited the amount of time they spent in school; hardly any (2%) had been placed in a special school or class because of poor health. Regarding the frequency with which ill health interfered with activities of a more voluntary nature—things that they "want to do"—one in twenty reported such interference "a lot" of the time and one in five "some of the time."

Three in four youths reported having at least one of the 45 medical problems about which they were questioned (Table V-4). Girls (82%) were more likely to report health problems than boys (70%). Among the total group of black youth 12-15 years old, a proportion somewhat better than half (55%) reported themselves as having at least two health problems. However, girls and boys differed significantly: two-thirds of the girls compared to roughly one-half of the boys reported *two or more* health problems; half of the girls and a third of the boys reported *three or more* problems; over a third of the girls and one-fifth of the boys *four or more;* and a quarter of the girls, compared to one in ten boys, reported that they had *six or* more health problems. Clearly girls felt that they had more health problems than boys. The number of problems increased with age for both and this difference was greater between older and younger girls than boys (see Chapter XI).

Findings from Medical Examinations

Turning to the findings from the medical examination, an average of 1.17 medical conditions was noted by the examining physicians for all 12-15 year old youths. The average number among girls was 1.32 and among boys, 1.04.

The number of health problems observed in the medical examination was smaller than the number reported in interviews. However, this reflects partly the fact that physicians summarized what they considered *significant* deviations from normal; the self-reports included all problems that occurred during the preceding year and no attempt was made to grade them as to degree of pathology.

Table V-4—Frequency of Self-Reported Health Problems (from Personal Inverviews)

		Black youth 12-15 years		Black youth 16-17 years	
	All (542)	Boys (297)	Girls (245)	Boys (52)	Girls (74)
Number of problems					
None	25%	30%	18%	23%	14%
One	20	23	18	21	15
Two	14	14	14	19	13
Three	13	12	13	10	11
Four or more	28	21	37	27	47
Mean number of self-reported health problems	2.8	2.2	3.5	2.9	4.3

degree of disturbance in usual functioning, or the like. Furthermore, merely suggestive or suspicious findings (even those for which youngsters were referred for repeat testing to confirm or rule out a diagnosis) were not included in these tabulations of physician noted conditions; one in five of the 12-15 year olds needed this latter kind of referral.[6]

Two-thirds of the examined youths were observed by physicians to have significant problems; conversely, a third were free of any notable medical condition. There were more girls (74%) than boys (61%) with at least one medically observed problem. (Table V-5)

About a third of both boys and girls had two or more conditions; one in eight had three or more medical conditions; and 3 in 100 had as many as four conditions noted by the physician.

While there was an overall average of 1.17 conditions noted by physicians, there were differences by sex and age. The relationship to age will be discussed in Chapter XI of this report, which deals specifically with findings regarding older adolescents. The relationship to sex is consistent with what was reported on personal interviews: girls both said they have and were observed to have a greater number of health problems than boys.[7]

Summary

Youngsters in Harlem share most of what are considered the major health problems of adolescence: dental, visual, emotional, weight, and skin problems. Considerable numbers reported headaches, stomach pains, speech problems, nosebleeds, vomiting—which may also be prevalent among other adolescents—but there are no comparable data against which to check this study's findings. Some other disorders were noted that, in terms of frequency, may be more prevalent among Harlem youth than adolescents generally: heart and blood pressure problems, asthma and anemia.

Whether the indicators of general health status used here—the number of self-reported and medically observed health problems, in particular—place this population at a disadvantage when compared with other youth cannot be determined. The fact that two-thirds of these young people were observed by physicians as having at least one medical condition (not counting dental problems) deviating significantly from what they considered normal, and that one in three had at least two of these conditions, indicates the degree of morbidity in this population.

Table V-5—Frequency of Physician-Noted Medical Conditions (from Medical Examinations)

	Black youth 12-15 years			Black youth 16-17 years	
	All (419)	Boys (225)	Girls (194)	Boys (30)	Girls (45)
Number of physician-noted conditions:					
None	33%	39%	26%	27%	13%
One	34	32	37	20	27
Two	21	18	24	30	38
Three	9	10	8	20	15
Four or more	3	2	5	3	7
Mean number of physician-noted conditions:	1.17	1.04	1.32	1.57	1.78

Chapter VI

Selected Health Problems of Adolescence

In this chapter, attention will be focused on five common health problems of adolescence: visual problems, emotional problems, menstrual problems, accidents and injuries, and growth and development. Some of these—visual problems, emotional problems, and menstrual problems—have been discussed earlier in terms of prevalence rates. Other details describing their occurrence among adolescents in Harlem are reported here.

Vision and Eye Problems

Information from Personal Interviews

About one in five among the 12-15 year old black youths said they had difficulty seeing the blackboard in school. Girls reported this difficulty more often than boys (23% and 14%, respectively). One in eight was aware of a problem with his vision or eyes that needed correction.

Better than a third[1] of the 12-15 year old youths had eyeglasses—almost half of the girls (45%) but fewer boys (28%). Nearly half of those with eyeglasses (42%) needed to wear them all of the time or for both near and distant vision. About six in ten of them admitted to not wearing their glasses all the time that they were supposed to. (Table VI-1)

Findings from Medical Examinations

Physicians reported a significant vision or eye problem for nearly one in ten of the youths they examined, with no sex difference. Tests of distance acuity at the medical examination (using the 20-foot Snellen chart) showed that, when tested *without* correction, 36 per cent had 20/30 vision or worse and 14 per cent tested at 20/70 or worse. Girls and boys showed no difference. Those who had eyeglasses and remembered to bring them to the examination (77 youths) were also tested *with correction*, and results from this smaller number of cases indicated that the vision of approximately two-thirds had been corrected to at least 20/25; one-third had corrections which still did not produce any better vision than 20/30.

A fourth of the 12-15 year old youths were functioning with less than 20/25 vision. Included in this estimate were those who wore eyeglasses to the examination, together with those who had no glasses; excluded are those with correction but who had left their eyeglasses at home. Since, as noted above, about one-third of those with eyeglasses had not been corrected to 20/25, the proportion of one-fourth functioning with less than 20/25 vision may be an understatement.

On tests of color vision, one in twenty showed some impairment. This was not more frequent among boys, but the degree of impairment was greater among them.

Mental Health: Reported in Personal Interviews

One in six reported that he had a "mental or emotional" problem. This included nearly a quarter of the girls and an eighth of the boys. (Table VI-1) Four per cent felt that such problems had interfered with their school work. These problems were described in terms ranging from "generally get nervous or excited" (38%), "shaking or trembling" (17%), "get angry" or "scream" (12%), bite fingernails (12%), get scared or heart beats hard (8%), cry (5%), stutter (4%), feelings get hurt easily (2%). Some problems were described in terms of their cause, e.g. being "hollered" or yelled at, argued or fought with (12%).

Another question was, "How often do you have a personal problem that upsets you—does that happen very often, does it happen sometimes or are you hardly ever upset by a personal problem?" Answers were considered suggestive of emotional stress. Four in ten youths reported that they "sometimes" or "very often" had upsetting personal problems, with five per cent reporting the extreme, "very often."

Questions relating to four other indicators of emotional health were also included in the personal interview:

Mood—One in six, but girls somewhat more often than boys, answered that they were having "not so good" a time these days. Slightly fewer of the boys and girls reported that most of the time they felt "not so happy." (Table VI-1)

Fears and worries—One-third reported that they worried "very often" about how well they were doing in school. Just about half reported that "sometimes" they worried about it. Altogether, four in five indicated some concern about their school performance. When asked if they worried about what their future would be like five or ten years hence, three in ten reported that they worried "a lot," boys more than girls. About the same proportion of three in ten said that they did not worry at all about their future.

Psychosomatic symptoms—Seven psychosomatic symptom items commonly included in psychiatric screening interviews (Langner, 1962) were included in the interview. Between one in four and one in five reported some sleep difficulties—girls somewhat more often than boys. Slightly fewer reported disturbance of appetite, with no difference between girls and boys. Shaking or trembling, shortness of breath, and dizziness or fainting were reported by fewer than ten per cent, and heart thumping hard without exercise by somewhat fewer than five per cent. Girls exceeded boys on all of these.

Self-esteem—Four items used to measure self-esteem were included in the interview. About one in ten of the 12-15 year old youths said he wanted to change a lot of things about himself; one in six youngsters felt that he was not able to do things as well as others his age; better than one in four agreed with the statement, "At times I think I am no good at all." Proportions of boys and girls did not differ on any of these. Replies on another self-esteem

Table VI-1—Selected Health Problems of Adolescence (Reported in Personal Interviews)
Black Youth 12-15 Years

	Black youth 12-15 years old		
Have trouble seeing blackboard in school	(539)	(295)	(244)
Yes	18%	14%	23%
No	82	86	77
Have uncorrected vision problem			
Yes	13%	11%	15%
No	87	89	85
Not sure	†	—	†
Wear eyeglasses or contact lenses			
Wear eyeglasses only	31%	26%	38%
Wear contact lenses	†	†	—
Had eyeglasses but lost them	4	2	7
Do not have eyeglasses or lenses	64	72	55
When supposed to wear glasses or lenses	(190*)	(83*)	(107*)
All the time or for both distance and near vision	42%	45%	39%
For reading and TV	34	33	35
Reading and close work only	19	17	21
For seeing at a distance	2	2	2
For seeing at a distance and TV	2	2	2
Some other times	2	1	2
Actually wear them when supposed to	(185*)	(81*)	(104*)
Yes	40%	38%	41%
No	60	62	59
Have nervous or emotional problem	(539)	(295)	(244)
Yes	17%	13%	23%
No	83	87	77
How much problem interferes with school work			
Great deal	1%	1%	2%
Somewhat	3	2	3
Not at all	13	10	18
Do not have nervous or emotional problem	83	87	77
How often upset by personal problem			
Very often	5%	4%	6%
Sometimes	34	35	33
Hardly ever	61	60	61
What sort of time having these days			
Not so good	16%	13%	19%
Pretty good	52	54	50
Very good	32	34	31
How happy feel most of time			
Very happy	31%	33%	28%
Pretty happy	57	56	59
Not so happy	12	11	13
Worry about how well doing in school			
Very often	33%	34%	32%
Sometimes	48	44	52
No, never	19	22	16

* Those who have eyeglasses or lenses. † Less than half of one percent.

measure showed that almost half the adolescents agreed that they felt useless at times, girls more than boys.

Menstrual Problems

Girls were asked about their menstrual history during the interview; the nurse at the medical examination asked additional questions about menstrual difficulties.

On their *personal interviews*, girls said that periods lasted an average of five days.[2] Seven in ten girls reported that their periods were regular and that they did not cause any problems. For three girls in ten who menstruate, however, periods were irregular and produced problems which caused them to stay home and/or to go to bed. One in six girls took medication for menstrual problems.

When questioned by the nurse at the medical *examination*, about one in five girls reported emotional reactions before their periods (upset, nervous, depressed), and a similar proportion reported a heavy loss of blood at some time when they menstruated. Almost two-thirds of the girls said they had a lot of menstrual pain. One in eight girls told the nurse she had a discharge between periods.

Accidents and Injuries: Reported in Personal Interviews

In the first year of the study youngsters were asked, "How many serious accidents and injuries have you had during the past year?" Girls reported more accidents and injuries than boys. Since that ran counter to expectations, the question was reworded in the second year of the study to ask about accidents and injuries that required at least one day's absence from school or work. These were counted as "serious." The results from the two years, therefore, will be considered separately.

In the first study year, about 10 per cent reported an accident or injury during the previous year, girls about three times more often than boys. In the second study year, with the more explicit definition of "serious," accidents or injuries were reported by only slightly fewer but this time by boys almost three times as often as girls. In almost half the cases a leg, foot or ankle was injured; an arm, hand or wrist was hurt in about a quarter of the cases.

Results from the two separate years suggest that accidents are not a leading cause of morbidity (as contrasted with mortality) during adolescence. The low frequency with which doctors observed results of recent accidents or injuries at the medical examination is consistent with this finding.

Growth and Development

With regard to growth and development, there is evidence from the Health Examination Survey of 6 to 11 year olds that black children tend to be taller while white children tend to be heavier. At all ages black girls are either equal to (age 8) or taller (ages 6, 7, 9, 10, 11) than white girls, but at every age white boys (though sometimes a little taller and sometimes a little shorter) are heavier than black boys (National Center for Health Statistics, 1970b). Whether this pattern holds for older youths is not known.

Information from Personal Interviews

The mean height reported by 12-15 year old boys was 64 inches and by girls 62 inches. Mean weights reported in the interview were 117 pounds for boys and 118 pounds for girls. Questioned as to their satisfaction with their growth and development, boys' dissatisfaction lay more in being too short: four out of ten thought they were too short, only one in ten too tall. Only girls in the 12-13 year age group were dissatisfied with their height.

As to weight, boys were more concerned about being underweight (31%) than overweight (22%). On the other hand, girls were more concerned about being overweight (34%) than underweight (24%). In another measure of concern about growth and development, four in ten reported weighing themselves less than a week prior to the interview, and seven in ten within a month before the interview; there were no differences between boys and girls in this respect.

Findings from Medical Examinations

At the examination, more boys were judged as underweight (27%) than as obese (11%); the proportions of examined girls judged as underweight and obese at examination were virtually identical (15% and 16%, respectively). Data from the medical examinations conducted at Harlem Hospital indicate that the mean measured height was 63 inches among 12-15 year old boys and 62 inches for girls. Mean weights taken during the medical examination were 115 pounds for boys and 118 pounds for girls. The similarity in measurements taken of boys and girls 12-15 years old is striking: boys were one inch taller, girls were three pounds heavier. More specifically, at ages 12-13, girls' weight and height actually exceeded boys'; by ages 14-15, boys were taller and heavier than girls. Krogman (1970) obtained comparable results regarding the relative height and weight of black boys and girls aged 12-15 in Philadelphia.

Correspondence Between Self-Reports and Physical Measurements of Height and Weight

There was close correspondence between the average height reported in personal interviews and measurements taken at medical examination. This lends further support to the observation that adolescents are valid reporters of their own health status. The average height reported by 12-15 year old boys was 64 inches; 62 inches among girls. The medical examination showed boys with an average height of 63 inches and girls 62 inches. Average weights were also similar: boys reported that they weighed 117 pounds on the average and girls 118 pounds; when actually weighed at the examination, boys averaged 115 pounds and girls 118 pounds. Thus, height reported by the boys in interviews averaged one inch over the measurements taken of three-quarters of them at the medical examination. There was no difference between the average of girls' self-reports and of measured height (based on the four-fifths of them who were examined). With regard to weight, boys reported themselves two pounds heavier on the average than was recorded at examination; the average weight of girls reported on interview and measured at examination did not vary.

More boys were judged underweight than overweight by the physicians at the medical examination, which

confirms what the boys themselves reported. While the proportions rated and rating themselves underweight were not far apart (27% and 31%, respectively), there was more concern among the boys about obesity (22%) than might have been indicated by professional judgment (11%). Concern among girls about obesity was also greater than the objective evidence from physicians' appraisals (34% considered themselves overweight while physicians rated 16% obese at medical examination). To a lesser extent, the concern among girls about being underweight (24% on self-report) was not matched by physicians' evaluation (15% were rated underweight at medical examination).

Summary

Data have been presented here which elaborate on the nature and occurrence of five common health problems in adolescence. The chief findings have been summarized above. What may be particularly worth noting again are the data concerning visual problems. While better than a third of the girls and a quarter of the boys have eyeglasses, more need them than have them; substantial numbers indicate that they are not wearing their glasses as much as they are supposed to; and an estimated third of those with eyeglasses do not have sufficient correction.

Chapter VII

Health Attitudes and Behavior

The preceding chapters were concerned with the health status of adolescents in Harlem, based on interviews and medical examinations. Adolescents' views about health—what they consider important health problems, how they perceive health itself, what they believe to be good and bad health practices, the things they themselves do (apart from getting medical care) which may affect their health—these will be discussed here. The source for these data was the personal interview, during which considerable attention was given to health attitudes and practices.

This emphasis needs little justification. It is now considered axiomatic that planning for improvement in the delivery of medical care is not just a matter of determining health care needs and then providing the resources to meet those needs; also to be taken into consideration (for all but infants and young children) are attitudinal and behavioral factors with significance for the maintenance of health. What does "health" mean in a particular population—here, young blacks? What is perceived as threatening to health? What do adolescents do to maintain their health? These questions have rarely been touched upon in the literature on adolescent health. (Of equal significance is how young people perceive and utilize health services—the health professionals and institutions which serve them; however, discussion of this particular issue is reserved for the next chapter, which deals with medical care.)

Perceptions of Neighborhood Health Problems

This information was obtained by means of an indirect technique frequently used in survey research. Youngsters were asked, "What do you see as some of the biggest health or medical problems for young people like yourself living around here?" There were four problems mentioned by at least one in ten of those interviewed: drug abuse, smoking cigarettes, drinking, and unsanitary living conditions. First, in order of importance, was drug abuse. This was mentioned by approximately *half* of the 12-15 year olds, with girls somewhat more likely to mention it than boys.[1] Just how salient the question of drug abuse was to youngsters is illustrated by the following comments made to interviewers:

> Everybody seem to be taking dope around here. (12 year old boy)
>
> You have to grow up around here with all these addicts. And if you see someone else doing it, it may seem like fun and you try it. (13 year old boy)
>
> Young boys and girls of 15 and 16 [are] taking dope. (13 year old girl)
>
> The worst problem around here is trying to get young people off drugs. (15 year old boy)

Cigarette smoking was mentioned by one-fifth of the sample as a major health problem of their contemporaries. Drinking and drunkenness were cited as major health problems by one-tenth of the boys and girls. Illustrative of their comments are the following:

> A lot of people like to get drunk or high and it affects their health by slowing them down. (13 year old boy)
>
> The men get drunk and fall out in the streets and bust their heads (13 year old boy)

Unsanitary living conditions were cited by another tenth of the sample in comments like these:

> There are too many roaches, rats and flies in the projects.... The streets are always dirty. (15 year old boy)
>
> People live in buildings that are all messed up. (14 year old boy)
>
> Most of the little children go outside and play right on the avenue with the trash and garbage spilled all over. (13 year old girl)

Conceptions of Health and Personal Health Concerns

The first question using the word "health" in the personal interview was, "How would you describe a healthy

person?" The behavior most frequently associated with being healthy was physical activity, endurance, agility, and stamina, as the following replies suggest:

A person who has a lot of energy—someone who plays around a lot—plays tennis and swims.

They have more loose joints.

Like activities keep them healthy—they take gym, go swimming.

He isn't short-winded—he could do a lot of things without getting so tired.

Four in ten youths, and boys (48%) more than girls (32%), mentioned some aspect of physical activity when describing a healthy person. Three in ten youths associated being well-built with being healthy, boys (32%) slightly more than girls (26%). Closely allied was the concept of strength, an idea expressed by a quarter of the 12-15 year olds, and boys (28%) more often than girls (18%). High on the list of ideas associated with being healthy were matters relating to diet: nearly a quarter mentioned eating the right food or a balanced diet; one in eight talked about eating the right amount and having a good appetite.

Resistance to disease (not getting sick) and the absence of either disease or physical impairment were mentioned by 20 per cent and 16 per cent, respectively. Cleanliness—about the person and his living conditions—was a theme mentioned by about one in ten when he described a healthy person.

These same themes appeared in replies to a question concerning what adolescents would like to discuss with a doctor if they had the chance to ask him anything they wanted. Foremost on the list, mentioned by one in five of all 12-15 year olds and by boys (23%) more than girls (14%), were questions concerning their general state of health:

How is my health coming along?

Ask him how I feel.

Ask him was I in shape—do I have any disease or anything?

Am I healthy now?

Nine per cent would like to discuss their weight with a doctor:

To look at my stomach to see if I'm overweight.

I have been trying to lose weight—I would like to ask him if I should and, if not, why not? About weight—losing weight and gaining—how it works.

How to avoid illness and stay healthy were questions that seven per cent of these youths said they wanted to talk over with a doctor.

When youngsters were asked how often they thought about their health, three-quarters said they thought about it "often" or "sometimes." These youngsters then were asked what they thought about and their replies provide additional insight into adolescents' conceptions of health. One in six thought about his health in general:

Will I ever be sick like some children I know?

I think about me and what's going to happen to me—I can't say my health don't bother me.

I think about how healthy I am or should be—I try to think about why I am so lazy at times.

I think about getting a medical check but then I don't go.

A similar proportion thought about getting sufficient exercise and keeping in shape (22% of the boys and 7% of the girls); their weight, usually about not getting fat (10% of the boys and 20% of the girls); eating the right food (10% of the boys and 17% of the girls); and about ways of protecting their health and avoiding illness (10%).

Adolescent health concerns are reflected in responses to another question that did not ask about health but rather what, if anything, adolescents would like to change about themselves. Among that half of the sample who would like to change themselves in some way, nearly one-quarter said they would like to change their weight; one-sixth—boys and girls equally—said they would like to change their height; one-eighth mentioned changing their general appearance; and approximately one-tenth—almost all of them girls—said they would like to change their hair.

Important in people's conceptions of heath are their beliefs about the preventability of illness and/or the inevitability of illness. Three questions in the personal interview tapped these attitudes. Nine in ten Harlem adolescents believed that being healthy was mainly a matter of taking proper care of themselves. However, three-quarters believed that, regardless of how careful a person is, he could expect a considerable amount of sickness in his lifetime; better than half felt that there was not much a person could do to avoid illness.

Personal Health Behavior

Given these conceptions of and attitudes toward health, what do youngsters regard as "good" or "bad" about their own health practices and what are they doing from day to day to maintain their health?

In the personal interview, adolescents were not asked about their own use of drugs. However, it is worth noting that when they were asked about things they themselves did that were not good for their health, one per cent—boys and girls alike—volunteered the information that they were using drugs.[2]

There were no such constraints in asking about cigarette smoking and drinking. Boys and girls were quite alike in the proportions who said they smoked; about one in six of the 12-15 year olds and a much greater proportion of the 16-17 year olds (50% of boys and 62% of girls) said they were smoking cigarettes. Indeed, both the proportion of smokers and the number of cigarettes smoked grew steadily with age. Approximately three out of ten smokers (representing one in twenty of all 12-15 year old black youngsters) reported smoking at least half a pack of cigarettes a day. (This may be compared with national data on teenage smoking for 1970, according to which 8% of 12-18 year old boys and 5% of girls this age were smoking half a pack or more of cigarettes daily; unpublished data from the National Clearing House for Smoking and Health.) The proportion of older adolescent girls in Harlem who smoke is higher than generally found (Public Health Service, 1969).

The salience of cigarette smoking as a health problem to youngsters in Harlem is illustrated by their responses to a question about things they did that were not good for their health. One in ten mentioned his own smok-

ing. After eating habits, this was mentioned most frequently as behavior which was bad for health. Responding to another question, among those youngsters who reported that they think about their health, one in twenty was sufficiently concerned about his smoking to mention it as something he thinks about; practically all who gave this reply were boys.

As to their own drinking behavior, more girls than boys in the 12-15 year old age group (20% and 12%, respectively) reported that they drank wine, beer, or other alcoholic beverages. As may be expected, drinking increased with age— and 16 and 17 year old boys were considerably more likely to drink than girls: 56 per cent of the boys this age and 34 per cent of the girls drank some alcoholic beverage. Regarding the salience of drinking as a health concern, when asked what they do that might be bad for their health, one per cent volunteered that they drank too much.

What do youngsters do that they consider *good* for their health? Themes they expressed when describing a healthy person and their personal health concerns recurred in accounts of their own health practices: exercise and physical activity, bodily appearance, diet and weight, resistance to disease, and cleanliness.

Physical activity was most prominent among the things they reported doing that were good for their health. Four in five youngsters mentioned something in the way of physical exercise:

> I play basketball almost every night—I walk a lot.
>
> Exercise—perhaps for one hour.
>
> I play—I dance.
>
> Track, swimming—improve your muscles—build you up inside—make your muscles stronger.
>
> I go with my friend to the park—climb mountains and stuff like that.

The difference between boys and girls was not as great as might be expected with regard to the frequency of mentioning exercise as one of their good health practices (87% of boys and 72% of girls).

The association of physical activity and health was demonstrated also in replies to an inquiry about poor health practices—things youngsters said they did that were *not* good for their health. In contrast to the 80 per cent who mentioned getting exercise as something that contributed to their health, one in twenty felt that he did not get sufficient exercise.

Evidence has already been presented regarding young people's concern about bodily appearance and body image, a consideration which might properly be recognized as underlying certain other replies—for example, the frequent references to exercise and physical activity already described and the emphasis on weight, diet, and eating patterns to be discussed next.

In their descriptions of a healthy person there was more frequent reference to the *kind* than to the amount of food eaten. In talking about their own health practices, adolescents again referred more often to the kind than to the amount of food they ate—although both were mentioned with frequency. Four in ten of 12-15 year old youths said that one of the good things they did for their health was to eat the correct food. Girls more often than boys mentioned that they ate the right amount of food (32% and 20%, respectively).

Yet, in terms of criticizing their own health habits, one in five (22%) felt that he ate too many sweets—girls (25%) slightly more often than boys (18%); almost 10 per cent referred to other improper foods that they ate (again girls were more likely to refer to eating the wrong food than boys). When asked about things they did that were harmful to their health, equal proportions of girls and boys, about one in fourteen, reported that they did not eat enough or that they skipped meals.

The interview also included direct questions about eating patterns. About half of the 12-15 year olds were satisfied with the amount of food they ate; four in ten thought they ate too much; one in ten that he did not eat enough. About half of the girls and better than a third of the boys reported that they ate more in snacks than in meals. More girls (19%) than boys (8%) reported eating about the same amount in snacks as in meals. Thus, in answer to direct questions, it appears that more girls than boys had inadequate eating patterns; or perhaps girls were more aware than boys of such patterns. Hardly any of these youngsters (7%) reported that they had ever been on a special diet—either medically or self-imposed.

Special questions were included to obtain a picture of nonalcoholic beverage drinking patterns. About six in seven of these youths said they drank some milk daily; four in ten drank at least three glasses a day. Daily consumption of soft drinks was slightly lower than that of milk. Almost equal proportions had at least one soft drink daily (82% drank soda compared to 85% who drank milk); one-fourth had three or more soft drinks daily. In Table VII-1, milk and soft drink consumption are compared.

One in seven said he drank coffee daily, and three per cent drank more than one cup of coffee in a day. More tea was drunk than coffee, with four in ten reporting daily tea consumption, girls more than boys. One in seven drank two or more cups of tea a day. Only one in twenty reported no regular pattern of drinking water daily; four in ten said they drank at least five glasses of water in a day.

One in eight of the youngsters cited cleanliness among their good health practices. As noted earlier, in addition to associating personal cleanliness with being healthy, unsanitary living conditions were also identified as a health problem. The interview included three direct questions that bear on living conditions. One inquired about the frequency of garbage removal: 15 per cent did *not* report daily garbage collection or access to an incinerator. Another question dealt with the adequacy of heat in the winter time: three in ten said they did *not* have enough heat. The third question asked about the supply of hot water in the buildings: about a quarter reported insufficient supplies of hot water.

In discussing their health practices, youngsters sometimes talked about the amount of sleep they got. One in five, somewhat more girls than boys, mentioned sleep as

Table VII-1—Daily Drinking Patterns (Nonalcoholic)

	Black Youth 12-15 Years		
	All	Boys	Girls
Mean number glasses of milk	2.27	2.40	2.10
Mean number of soft drinks	1.85	1.78	1.93

something they did that was good for their health. Insufficient sleep was mentioned third most frequently as one of their poor health practices, after diet and smoking. Seven per cent of all the 12-15 year olds were critical of their own sleep patterns.

How much did they actually sleep? The mean number of hours on weekday nights was close to nine hours and almost two thirds slept this much.[3] Boys were somewhat later risers than girls.

Nine in ten of these youths slept in a bedroom; about one-third slept in a room by themselves; four in ten slept in a room with one other person. About one in twelve slept in a room with at least three other people. Questions about sleep disturbance have been discussed in Chapter V in connection with psychosomatic indicators of emotional problems. There it was noted that more girls reported trouble falling asleep (35%) than boys (22%), and slightly more girls reported being disturbed by bad dreams (22%) than boys (18%). Since girls were *not* more likely to sleep in rooms with others (78% of the girls slept in a room by themselves or with just one other person compared to 69% of the boys), their greater sleep problems would not appear to be a function of less comfortable sleeping space.

Summary

This investigation into conceptions of health, health concerns and health practices among 12-15 year old adolescents in Harlem showed considerable awareness of these matters. Drugs, smoking, drinking, and sanitary conditions were foremost "public" health concerns to them. Physical activity, bodily appearance (including strength and weight), diet, resistance to disease, cleanliness and sleep were matters most likely to be discussed in connection with personal health practices and behavior. All but sleep figured prominently in adolescents' ideas of what it is to be healthy.

Chapter VIII

Medical Care Utilization

As noted earlier, one of the underlying assumptions in this study was that adolescents in Harlem present numerous unmet needs for health care. Determining those needs has to do with what their health problems are and what care they have received for those problems. Put simply, the need for medical care in this (or any) population may be expressed in terms of the difference between the two. The first of these, health problems, has been described in an earlier chapter (V). The second, utilization of health services, is dealt with here.

In considering adolescents' utilization of medical care facilities, it is important to be mindful of Harlem's disadvantage in available resources.[1] The utilization of health services depends on needs for care, but it also depends on the availability of these services. (Attitudes about health and health care are also involved and they will be discussed in Chapter IX.) This chapter deals with when, where and how often adolescents utilized medical services, and also with whether they sought care for the specific health problems they reported. Information about these matters was derived from interviews with adolescents.

Use of Medical Services: Reported in Personal Interviews

Almost half of the 12-15 year olds reported that they had seen a physician within six months prior to their interview; 70 per cent of them had visited a physician at least once during the year prior to interview. (This may be compared with National Health Survey findings for 1968, according to which 67% of white and 55% of nonwhite youngsters 5-14 years of age, nationwide, had seen a physician during the previous year; National Center for Health Statistics, 1971a). In the Harlem sample only one in ten reported that he had not seen a physician within the past two years.

Youngsters were also asked to estimate the number of times they had visited a physician during the year before their interview. (Such retrospective estimates are, of course, subject to error.) One in eight of the 12-15 year olds said he had not visited a physician at all during the previous year; one-quarter reported one visit, and half had seen a physician two or more times during the preceding year; another ten per cent had seen a doctor at least once during the year but were unable to recall the number of times. (Findings from the National Health Survey show 2.8 physician visits per person among whites 5-14 years of age and 1.7 physician visits among nonwhites in 1968; National Center for Heath Statistics, 1971a.) Adolescents in Harlem, aged 12-15, reported an average of 3.1 doctor visits during the year before interview, 2.7 by the boys and 3.5 doctor visits by the girls. Thus boys in Harlem visited doctors as often as the national sample of white children; adolescent girls in Harlem visited the doctor more often than white children, nationally, and more often than boys in Harlem.[2]

Three out of ten youngsters said they "ever" see a physician for a checkup when there is nothing especially wrong with them. Among this group, in turn, four in ten reported that they get checkups at least twice a year and eight in ten at least once a year. Among those who said that they never get such checkups, nine in ten said they would like to. Boys and girls showed no differences.

Where do adolescents in Harlem generally get medical care? One in four of the 12-15 year olds indicated that they had a private physician (girls slightly more then boys). Another eight per cent reported that there was one physician whom they usually saw in a clinic or other health

facility. One-third of the youngsters reported a "usual" place for receiving medical care but not a private or a "usually seen" physician. Harlem Hospital was named as the usual source of medical care by 19 per cent and all other outpatient facilities or health centers by 25 per cent. One in three said he had no regular source of care.

Schools are sources of medical care and of referrals for care. Approximately four in ten of the 12-15 year olds reported that they had been given an examination by a school physician during the previous year. Furthermore, when youngsters were asked where they had last had their eyes checked, almost half (46%) mentioned school, boys somewhat more often than girls (50% and 41%, respectively). Eye examinations in schools are often conducted by classroom teachers and not all of them can be classified as medical care.

More than a quarter of the adolescents (28%) reported visits to a physician's office for their last eye examination, girls more often than boys. About one in ten said he had last had his eyes checked at Harlem Hospital or some other hospital clinic and a similar proportion at one of the New York City Department of Health stations. About one in ten had most recently had his eyes checked two or more years ago, and four per cent said their eyes had never been checked.

Seven in ten adolescents reported that their parents had made appointments with physicians for them; appointments were arranged through school for about one in six. Only one in twenty youngsters 12-15 years old said he made his own medical appointments.

Approximately four out of ten youngsters reported that they had stayed in a hospital overnight or longer at least once since birth. One in seven reported two or more such hospitalizations, and just about one in twenty said he had been in a hospital three times.

Regarding the utilization of services at Harlem Hospital—the major single provider of hospital care to the Central Harlem community—six in ten youngsters said they had used the clinic services at the Hospital at least once, nearly a third had visited it at least three times, and one in eight ten times or more. Boys had used the clinic facilities at Harlem Hospital somewhat more than girls had. More than a third of the 12-15 year olds had used the emergency room facilities at this hospital; one in eight had been there at least three times. There was little difference between boys and girls in the frequency of their visits to the emergency room.

Table VIII-1—Utilization of Physician Services* - Reported in Personal Interviews (in Cumulative Proportions)

Number of conditions for which physician was consulted	Black youth: 12-15 All (542)	Boys (297)	Girls (245)	16-17 Boys (52)	Girls (74)
Four or more conditions	7%	4%	9%	8%	13%
Three or more conditions	12	9	14	16	21
Two or more conditions	23	19	27	22	35
One or more conditions	44	37	52	52	62

* Figures are based on the total sample, not only on those reporting one or more conditions.

Table VIII-2—Physician Consultations for Frequently Reported Health Problems

Condition	Black Youth 12-15 Years: All 12-15 # with condition	All 12-15 % saw doctor for condition	Boys # with condition	Boys % saw doctor for condition	Girls # with condition	Girls % saw doctor for condition
Asthma, wheezing	48	81%	26	88%	22	73%
Hayfever or other allergy	46	57	23	61	23	52
Long-lasting cough	51	47	29	45	22	50
Skin problem	71	46	17	53	54	44
Repeated sore throats	66	44	26	42	40	45
Frequent colds	101	42	44	43	57	40
Trouble hearing	36	42	12	42	24	42
Repeated sinus trouble	42	40	18	44	24	38
Shortness of breath	37	38	15	40	22	36
Dizziness, fainting	33	36	14	57	19	21
Chest pains	59	34	26	35	33	33
Repeated nosebleeds	53	34	35	29	18	44
Repeated headaches	94	28	51	27	43	28
Stomach pains	85	28	35	26	50	30
Vomiting	52	27	19	5	33	39
Backaches	34	21	11	36	23	13
Speech problems	68	15	36	22	32	6
Shaking or trembling	40	15	16	6	24	21

Table VIII-3—Physician Consultations for Infrequently Reported Health Problems

Condition	All 12-15		Black Youth 12-15 Years			
			Boys		Girls	
	# with condition	% saw doctor for condition	# with condition	% saw doctor for condition	# with condition	% saw doctor for condition
Tuberculosis	1	100	1	100	—	—
Rheumatic fever	2	100	—	—	2	100
Jaundice, hepatitis	1	100	1	100	—	—
Anemia	6	100	2	100	4	100
Gonorrhea	1	100	—	—	1	100
Hernia or rupture	5	80	2	100	3	67
Long-lasting bronchitis[a]	10	70	5	60	5	80
Heart conditions	16	63	4	75	12	58
Frequent earaches	28	64	12	50	16	75
Deformity or permanent stiffness in extremities*	6	50	5	40	1	100
Heart thumping hard, racing	21	48	4	75	17	41
Worms or parasites	5	40	1	100	4	25
Difficult or frequent urination	8	38	4	50	4	25
Frequent constipation	19	16	6	33	13	8
Frequent diarrhea	10	10	4	25	6	0
Other trouble with limbs	10	10	6	17	4	0
Bed wetting	14	7	9	0	5	20
Indigestion	18	6	6	0	12	8
Blood in bowel movement	7	0	2	0	5	0
Blood in urine	2	0	1	0	1	0

[a] Second year only.

Approximately one-fifth had stayed overnight or longer at least once in Harlem Hospital, with boys somewhat more likely to have done so than girls.

Medical Care Sought for Health Problems Reported in Personal Interviews

In addition to determining whether youngsters reported experiencing certain specific health problems during the previous year, the interview obtained information about whether they had ever seen a physician for those problems. The conditions reported varied widely in terms of seriousness (however defined) and a simple count of the number of reported conditions for which a physician was consulted provides only a general picture of the utilization of medical services. Fewer than half (44%) of the adolescents said they had seen a physician about any of the 45 health problems mentioned in the interview, even though 75 per cent reported having at least one of these problems (82% of the girls and 70% of the boys) and the mean number of conditions reported was 2.8 (3.5 for girls and 2.2 for boys). More girls than boys had seen a physician about at least one reported health problem (52% of the girls and 37% of the boys), almost the same difference as in the proportions who reported that they had at least one health problem.

Medical care had been sought more often by girls than by boys (Table VIII-1) which is not unexpected since they reported more medical problems. The data show that once they reported a health problem, boys and girls did not differ in seeking medical care for it. There were some conditions for which boys were more likely than girls to have obtained care. (Table VIII-2)

The number of conditions for which care was sought provides a general measure of the level of medical care utilization. Relating physician visits to specific reported health problems provides additional information about the care received. Since some problems are more serious than others, they are more likely to get attention under almost any circumstances. Furthermore, there is not necessarily a positive relationship between the frequency with which a particular health problem is reported and the likelihood that a physician will be consulted; some relatively uncommon health problems may get more attention than the more common ones. This is illustrated in Tables VIII-2 and VIII-3.

Table VIII-2 shows the rates of physician consultations for the more frequently reported health problems. Four-fifths of the adolescents reporting asthma or wheezing said they had seen a physician for that condition, boys somewhat more often than girls. About half reporting hay fever or some other allergy had consulted a physician, as had those with a long-lasting cough, skin problems, repeated sore throats, frequent colds, and trouble with hearing. About a third of those reporting shortness of breath and chest pains said they had seen a physician for these problems. (Boys and girls differed only slightly in the frequency with which they say they saw physicians for these conditions.) Speech problems, dizziness or fainting, and backaches were problems that boys were more likely to have consulted a doctor about than girls. On the other hand, girls who reported vomiting or shaking and trembling tended to have seen a physician about these problems more often than boys.

Table VIII-3 lists infrequently reported health problems (reported by approximately 5% or fewer of the 12-15 year olds) and the proportion of youngsters who saw

Table VIII-4—Frequency of Self-Reported Conditions and Self-Reported Doctor Visits (from Personal Interviews)

Condition	Black Youth 12-15 Years					
	All 12-15		Boys		Girls	
	Per cent reporting (542) [a]	Per cent saw doctor (542) [a]	Per cent reporting (297) [a]	Per cent saw doctor (297) [a]	Per cent reporting (245) [a]	Per cent saw doctor (245) [a]
Eye trouble	26	9	20	6	32	13
Frequent colds	20	8	16	6	26	9
Repeated headaches	18	5	18	5	18	5
Nervous or emotional problems	17	1	13	1	23	1
Stomach pains	16	4	12	3	21	6
Skin problems	14	6	6	3	25	10
Speech problems	13	2	13	3	14	1
Repeated sore throats	13	5	9	4	18	8
Chest pains	11	4	9	3	14	5
Pains in legs or arms [b]	14	3	12	3	16	3
Repeated nosebleeds	10	3	12	3	8	3
Long-lasting cough	10	4	11	4	9	5
Asthma, wheezing	10	7	9	8	10	7
Vomiting	10	3	6	*	15	5
Hay fever or other allergy	9	5	8	5	11	5
Repeated sinus trouble	8	3	6	3	10	4
Shaking or trembling	8	1	5	*	10	2
Trouble hearing	7	3	4	2	10	4
Shortness of breath	7	3	6	2	9	3
Backaches	7	1	4	1	10	1
Dizziness, fainting	7	2	5	3	9	2
Frequent earaches	5	3	4	2	7	5
Heart thumping hard	4	2	1	1	8	3
Frequent constipation	4	1	2	1	6	*
Long-lasting bronchitis [c]	4	3	3	2	4	3
Other problems with lower limbs [c]	4	*	4	1	3	—
Indigestion	3	*	2	—	5	*
Bed wetting	3	*	3	—	2	*
Heart conditions	3	2	2	1	5	3
Anemia	2	1	1	1	2	2
Frequent diarrhea	2	*	1	*	2	—
Urination problems	2	1	1	1	2	*
Deformity or stiffness in limbs, extremities, back [c]	2	1	3	1	1	1

[a] The base for each percentage varied slightly according to the numbers answering.
[b] First year only.
[c] Second year only.
* Less than half of one per cent.

a physician for them. This table includes infrequently reported symptoms which may be significant but for which care was seldom sought, such as frequent diarrhea, blood in bowel movement, worms or parasites, frequent constipation, indigestion, difficulty or frequent urination, blood in urine, bed wetting, deformities and other difficulties with limbs or back.

The differential pattern of medical care utilization according to condition can be viewed in another way. The frequency with which problems were reported can be compared with the proportions of all adolescents (rather than of those with the conditions) who said they had seen a physician about these problems. (Table VIII-4)

The discrepancy between the proportions who reported a problem and who consulted a physician for it are one set of findings to consider in setting priorities based on needs for medical care. The greatest discrepancies occurred in headaches, skin problems, speech problems, repeated sore throats, chest pains and other respiratory problems, repeated nosebleeds, digestive problems (including vomiting and constipation), musculoskeletal disorders (especially backaches and problems with lower limbs), neuromuscular disorders (shaking and trembling, dizziness and fainting), and trouble with hearing—especially among girls.[3]

Summary

What was learned about utilization in this study? As reported in personal interviews, utilization of medical services for specific health problems seldom reached as high as 50 per cent of those reporting any one health problem. The one exception was asthma and wheezing; four in five youngsters with that problem had at some time consulted a

physician for it. Boys and girls reported similar patterns of utilizing medical services in terms of the recency and frequency of visits to physicians and their usual source of care. The few measures which permitted some comparison with nationwide data suggest that 12-15 year olds in Harlem have a relatively higher than usual rate of physician contacts. Despite this, a great many of their reported health problems remain medically unattended.

Chapter IX

Attitudes Toward Medical Care

As suggested in the preceding chapter, more is involved in studying the utilization of medical services than counting the number of times people visit physicians, or the interval since their last visit. Utilization involves (1) the availability of health services and (2) attitudes—including perceptions of need (motivation), perceptions of health services, and attitudes toward the use of medical care.[1] Patterns and extent of utilization of services were discussed in the preceding chapter. To be discussed here are findings concerning the attitudinal component of medical care utilization. Included in information about youngsters' satisfaction with services received, attitudes and preferences regarding the major providers of medical services—physicians, and reactions to the medical examination offered as part of this project. All but the last were obtained from personal interviews with adolescents. Their reactions to the medical examination were recorded on a self-administered questionnaire which each adolescent completed at the conclusion of his examination.

Perspectives on Medical Care

The personal interviews included questions about adolescents' satisfaction with the medical care they had received and their perceptions and preferences regarding the major figures in the delivery of health care—nurses and doctors.

Among the two-thirds of the 12-15 year olds who named a private physician or other usual source of medical care, the great majority (86%) rated the care as "excellent" or "good." One in seven considered the care he received as just "fair" or "poor," with more boys than girls giving this reaction.

However, only about half of the adolescents rated the health care provided them by the school doctor or nurse as "excellent" or "good." Approximately one-quarter rated it as "fair" or "poor," and an equal proportion had no opinion. Approximately six in ten rated Harlem Hospital "excellent" or "good"; four in ten rated it as "fair" or "poor."[2]

Regarding their perceptions of physicians in general, all youngsters were asked, "What things do you like about doctors?" and also, "What things don't you like about doctors?" In answer to the first question, half the youngsters commented that they liked physicians because "they cure you" or they "get you well." One in ten referred specifically to the physician's skills in diagnosis: "They find out what's wrong with you"; "They check you all over, not just the place that hurts."

About one in six referred to something in the physician's attitude or manner that they liked: "They treat you nice"; "Sometimes when they examine you, they joke with you"; "You can tell your problems to them."

A few youngsters (4%) spontaneously voiced appreciation of physicians' verbal explanations and advice: "They always answer your questions, and they try to tell you the best way they can"; "Everything he puts on me, he explains what it is."

A few youths noted that physicians "try not to hurt you": "They tell you to be calm and relax so that the needle won't hurt"; "When you get the needle they always tell you it won't hurt—sometimes they give you a lollipop if you don't cry."

One in four youths did not mention anything that they liked about physicians.

Concerning what youngsters do *not* like about physicians, foremost were painful types of care—needles, shots, injections, and stitches. Slightly better than one in three commented about these things: "Sometimes they give you needles when you don't want none"; "Their needles—that thing sticks me and hurts."

About one in ten referred to some other aspect of physicians' care which he did not like: "Different kinds of medicines they give you—when I got out of hospital about five years ago, they gave me 12 kinds of medicine"; "You know something is wrong with you—you want to find out and they won't tell you"; "They don't want you to have your favorite food when you're on a diet."

Seven per cent of the youngsters noted something about a physician's attitude or manner they did not like, while six per cent felt that the physician did not care enough or was not sufficiently concerned about the young person whom he treated: "Some are mean. They talk down to you when you can understand—treat you like a baby" "Some don't care about you"; "They take too long to wait on patients that are really ill."

Almost one girl in ten said she did not like or did not feel comfortable when being examined by a male physician: "Sometimes if they are men you hesitate to tell them something"; "I don't like men doctors to check up on me—I feel ashamed for men doctors to look at you."

A few young people mentioned that physicians handled a person roughly or were careless and made mistakes. Nearly half said that there was nothing that they did

not like about physicians; more girls than boys were critical. Girls' greater criticism of physicians and their diffidence about male physicians were the major differences between them and boys in their attitudes toward physicians.

Regarding how promptly youngsters consult a physician when they do not feel well, a tendency to postpone physician visits was indicated in answers to the following question during the interview: "In general, when you're not feeling well, do you usually see a doctor right away, or do you wait a while to see if it will go away, or do you usually put off seeing a doctor as long as you possibly can?" Hardly one in ten replied that he saw a physician right away; three-quarters said they waited a while; and one in six indicated that he put it off as long as possible.

Preferences Regarding Delivery of Medical Services

The personal interview included a direct question about the preferred sex of physicians: "If you could choose the doctor you go to for an examination, would you prefer a doctor who is a man, or a doctor who is a woman, or doesn't it matter?" Youngsters indicated preferences for physicians of their own sex: more than half the boys (55%) said they would rather have a male physician and a similar proportion (59%) of the girls indicated a preference for a women physician. About two in five said the sex of the physician did not matter to them.

Only a quarter of the 12-15 year old adolescents said they would prefer a physician who specialized in treating teenagers; one-third of the girls but only a fifth of the boys stated this preference. The others either preferred a physician who treated the entire family (46% of boys compared to 31% of girls) or expressed no preference.[3]

In the personal interview youngsters were also asked with whom they preferred to discuss their health: "If you had your choice, would you rather discuss a question you have about your health with a doctor, with a nurse, or with someone else? If 'someone else': Who?" The physician was the choice of better than half the group of 12-15 year olds. Here a sex preference was clearly indicated; four out of five boys but only one in three girls preferred to discuss questions about health with a physician. Half the girls, on the other hand, opted for a nurse, but almost no boys did.[4] For about one in ten youths a parent or parents were the choice for discussing questions they had about their health.

More of these adolescents would rather see a physician in a private office (62%) than in a clinic; one-quarter stated a preference for a clinic. About one in seven said it did not matter to him. Those who preferred a private office most often referred to not having to wait (33%); privacy when seeing and talking to the doctor was of greater concern to girls (31%) than to boys (20%); the private physician's spending more time with his patient (14%); and greater quiet in a private office (11%). Only one in ten thought medical care was better in a private office than in a clinic.

Among those who preferred a clinic, no one reason for this preference was given substantially more often than any other: about one in seven or eight said it was because that was where they had always gone, because private physicians cost too much, because the care and service were better in a clinic than in a private office, and because a clinic was better equipped, both in terms of facilities and physicians, than a private office. About one in ten stated that he enjoyed having other people around when he is in a clinic.

Reactions to the Medical Examination

In responding to self-administered questionnaires that 405 of the 12-15 year old black youths filled out at the conclusion of the medical examinations, half indicated that they liked *all* of the examination, better than a quarter that they liked *most* of it, and one in six that he liked *some* of it. Only four per cent of the youngsters indicated that they disliked most *or* all of the examination.[5]

This generally favorable attitude was reflected in answers to another question at the end of the questionnaire: "Would you return if another examination were scheduled a year from now?" About seven in ten said they certainly would come back; a quarter were uncertain; only four per cent said they were certain *not* to come back. Another question was whether boys and girls would rather be scheduled for examinations on the same day or would prefer to have separate examination sessions. Girls were more sensitive to this issue than boys: 60 per cent of the girls and 36 per cent of the boys indicated a preference for separate sessions. (This question was intended to tap opinions only; separate sessions for boys and girls were never arranged.)

When asked what they liked about the examination, one-quarter indicated that they liked "everything"; one-third (more girls, 39%, than boys, 29%) singled out the examining physician; one in ten commented favorably about the nurse; two in ten about the X-ray; about one in eight referred to the vision test or the dental examination; and seven per cent wrote that they liked the blood test. Eight per cent made a favorable comment about the way they were treated in general. And this same proportion wrote that they liked finding out about what was wrong with them. Three per cent referred to the fact that it did not take too long, and that they did not have to wait.

That the youngsters were aware of, and responded to, the way that they were treated became apparent from what 210 youngsters said they liked about the examining physician and from what 160 wrote about the nurse. Youngsters commented that the physician was friendly and kind; that she or he explained things, answered questions and did not rush; and that the physician took a personal interest in the youngster and his problems. They also noted that the nurse was friendly, kind or considerate.[6]

What did the youngsters not like about the examination? Only two things were mentioned with any frequency. The first, and by far most often mentioned, was the "needle" or the blood test; one-third of the youths mentioned it, more girls than boys. Nine per cent said they did not like the dental examination.[7]

Printed at the end of the self-administered questionnaire was, "Thank you very much for answering these questions." One out of seven youngsters saw fit to write in a reply either "You're welcome" or, more often, "Your welcome." They also wrote in other things: "Your more than welcome"; "Thank you all, yours truly"; "Thank you for good looking nurses"; "My pleasure"; "Anytime"; "Thank you too for all the attention and great care your nurses, your doctor, and your funny dentist. Most of all I loved your doctor he's great"; "And thank you for giving me the examination"; "And thank you for all you have said and done"; "It was nice being here."

Summary

Attitudes have been discussed which relate to the actual delivery of health services: perceptions of providers and of the quality of health care; preferences regarding the delivery of health services; and reactions to the medical examination provided in this project.

Notable was the similarity between 12-15 year old boys and girls in their attitudes toward health care services already received. Girls, however, were diffident about being examined by male physicians; in a similar vein, they were less inclined than boys toward mixed examination sessions—where boys and girls appear at the same time. Attitudes toward physicians were generally favorable and reactions to the medical examination provided in this study were highly positive. The appreciation youngsters expressed of the care and courtesy they received during their examination can be viewed as a sign of their receptivity to well-planned medical services.

Chapter X

Needs for Medical Care

It was suggested earlier that the nature and extent of adolescents' needs for medical care could be studied by subtracting the medically attended conditions from the base of reported conditions. The difference provides a measure of unmet needs for care.[1] Findings discussed so far all have relevance for the major question to be dealt with here: What kinds of and how much medical care do Harlem youth need?

This chapter is based on information from the medical examination which 78 per cent of the interviewed adolescents received, and uses the examining physicians' referrals as the indicator of unmet needs for medical care. These referrals for further care were made at the conclusion of the youngsters' medical examinations; families were notified and appointments for follow-up care were arranged at Harlem Hospital for the 90 per cent of those examined who wished to have their follow-up care rendered there.

The ratio of treated to untreated conditions noted in these physicians' referrals will provide the first estimate of the need for care, relative to what has been available (or utilized). The number of physician referrals will then be analyzed as a general meaure of the need for medical services by Harlem adolescents. Finally, referrals for care of specific medical problems will be considered as an indicator of the kinds of medical care services these youths need most.

Ratio of Treated to Untreated Medical Problems

Not all health problems—i.e. deviations from what the physicians considered normal—were given referrals for care. Some problems were not referred for follow-up care because the physicians felt that nothing needed to be done about them (e.g., heart murmurs) or because the youngsters were already under treatment for them. In addition, there were referrals for further investigation: cases for which the examination did not provide sufficient evidence as to the presence, absence, or seriousness of a disorder and for which further or repeat testing was considered necessary. Table X-1 shows the frequency with which physicians noted conditions with these varying referral requirements. Of particular interest is the ratio between medical problems already under treatment and those for which care was recommended. For each condition already under treatment there were eight that needed care.[2]

Table X-1—Physician Notations About Referral Requirements (from Medical Examinations)

	Proportions of black youth:					Mean no. of black youth:				
		12-15		16-17*			12-15		16-17	
	All (419)	Boys (225)	Girls (194)	Boys (30)	Girls (45)	All (419)	Boys (219)	Girls (194)	Boys (30)	Girls (45)
With at least one physician referral for care	49%	45%	54%	63%	69%	.76	.69	.85	1.00	1.31
Already under treatment for at least one physician-noted problem	8%	7%	9%	3%	4%	.09	.08	.11	.03	.04
With at least one physician referral for further investigation	20%	17%	22%	13%	31%	.23	.22	.25	.13	.33
With at least one physician-noted problem *not* needing referral	25%	22%	29%	33%	31%	.32	.28	.36	.53	.42

* Data for 16-17 years old will be discussed in Chapter XI.

Table X-2—Medical Problems Requiring Referral (in Cumulative Proportions)

No. of physician referrals	All (419)	Black youth 12-15 Boys (225)	Black youth 12-15 Girls (194)	Black youth 16-17 Boys (30)	Black youth 16-17 Girls (45)
Three or more	6%	6%	7%	7%	13%
Two or more	20	18	22	30	42
One or more	49	45	54	63	69

Number of Health Problems Referred for Care

Fewer than 10 per cent of these youths were already under treatment for physician-noted health problems, and a quarter had a health problem noted by the physician which did not require referral. Of particular significance is that *two-thirds of the medical problems* (exclusive of referrals for further investigation) noted in the examination *required care*. One-half of the youngsters examined had at least one problem for which they required referral for care. Twenty per cent had two or more such problems. The frequency of health problems requiring referral is shown in Table X-2 (in cumulative percentages).

What should be noted here is the direct correlation between age and needs for medical care: the older the adolescent, the more medical care needed among both boys and girls. This will be discussed in further detail in Chapter XI (Tables XI-1 and XI-2). At every age, girls needed more medical care than boys.

Kinds of Health Problems Referred for Care by Examining Physicians

Table X-3 presents, in order of frequency, the health problems which were noted as requiring care; it shows the proportions of the sample who received physician referrals for each listed condition. Medical care was needed by five per cent or more of the examined youths for the following kinds of problems: vision problems, by almost one in five of those examined; heart and blood pressure disorders, by one in seven; respiratory disorders, by one in twelve; nervous or emotional problems, by one in twenty; skin and complexion problems, by about one in twenty. Girls, but not boys, presented additional problems in nutrition, blood system, and urinary tract, each of which required referral by one in twenty examined girls.

Some Other Considerations

Altogether, 372 referrals for further care were made by the examining physicians. (Some youngsters were referred for more than one condition.) Of this total, 337 were made to services at Harlem Hospital. Approximately 40 per cent of the appointments which were made for these adolescents were actually kept over an interval of six months or more, a cooperation rate well below that achieved in the initial examination. In Chapter IV, some factors which may have contributed to this lower rate of obtaining follow-up care were mentioned.

What adolescents themselves reported in personal interviews about utilization of medical services for particular health problems also had implications for defining their need for medical care. Sizable discrepancies between proportions of adolescents reporting health problems and the proportions who had seen a physician for them provide another measure of needs for care (Chapter VIII). The absence of such doctor consultations for certain problems has to do with whether or not the problem was serious, as well as the availability of and accessibility to care. Another factor is adolescents' (and parental) awareness of what are medically treatable health problems. For example, if a youngster has a speech problem or has frequent headaches, would he or should he think of turning to a physician for help with them? When determining what health services are needed, questions like this also need to be considered.

Summary

Whether measured in terms of the number of examined youngsters requiring referral or in terms of the number of conditions which required referral, there is evidence of considerable unmet need for medical care among adolescents in Harlem. The implications of this finding will be considered in the final chapter of this report.

Table X-3—Physician Referrals for Care

Condition	All (419)	Black youth 12-15 Boys (225)	Black youth 12-15 Girls (194)
Vision and eye problems	18%	18%	18%
Heart and blood pressure	14	15	12
Heart	10	11	8
Blood pressure	4	4	4
Respiratory tract	8	8	7
Upper respiratory	5	5	5
Lung and bronchia	2	3	2
Nervous or emotional	6	4	9
Skin and complexion	5	4	6
Obesity	4	4	5
Blood disorders	4	3	5
Urinary problems	4	2	5
Neuromuscular and musculoskeletal	3	3	3
Speech problems	2	3	3
Mental retardation	2	2	2
Menstrual and pregnancy	1	—	3
Other genital and reproductive tract disorders	1	2	1
Accidents or injuries	1	1	.5
Hearing	1	.4	1
Breast conditions	1	—	2
Endocrine and metabolic	.5	—	1
Hernia	.5	1	—
Other growth problems	.2	.4	—
Abdominal tenderness and vague signs	.2	.4	—

Chapter XI

The Older Adolescent

So far, discussion of findings in this report has concentrated on the 12-15 year old adolescents—297 boys and 245 girls—who were studied over two years. Although this research was originally designed to study proportionate numbers in the entire age span of 12-17, the older adolescents 16-17 years of age were included in only one study year (the second). They numbered 52 boys and 74 girls among the interviewed; 30 boys and 46 girls among the examined. Given the sampling error with groups of this size and the absence of a second sample with which to average the findings, discussion of the older adolescents has been reserved for this chapter. Those aspects of the older adolescents' health status, utilization of health services, and needs for care which differ from those of younger adolescents will be discussed here.

Participation in Examination

The lower rate of participation in the examination on the part of older adolescents was discussed in Chapter IV. Different factors contribute to this decline. Among them are competing demands on time and responsibilities at work or home; older youths are also less likely to be responsive to parents' wishes. Additionally, it can be hypothesized that older adolescents have lost or outgrown some of their earlier insecurity about growth and development, appearance and body image—and thus may be motivated to use medical care such as that provided in the examination only when they have specific health problems. For example, the older boys were more likely than the younger boys to say that what they liked about the examination was finding out what was wrong with them. Upon examination, older adolescents were observed to have more medical problems than the younger, a difference larger than that between what the older and younger reported on interview. The evidence is by no means clear as to how much "selection bias" operated among the 58 per cent of older boys and 62 per cent of older girls who appeared at the medical examination; but when interpreting the findings from medical examination it is important to remember that proportionately fewer of the older adolescents appeared. Thus, they were likely to be less representative of all 16-17 year olds than the examined 12-15's were of all 12-15 year old youth in Harlem.[1]

Prevalence of Health Problems: Reported in Personal Interviews

Generally, older youths reported the same problems as the younger adolescents: vision problems, respiratory problems, headaches, nervous or emotional problems, and skin problems. However, almost every health problem increased in prevalence among 16-17 year olds. (These data were obtained from the interviewed sample, which did not suffer the same attrition as the examined sample.) Two problems in particular increased substantially with age: anemia was reported by 18 per cent of the older girls compared to 2 per cent of the younger; skin problems were reported by 16 per cent of the older boys compared to 6 per cent of the younger and by 34 per cent of the older girls compared to 25 per cent of the younger. In addition, questioning about menstrual problems showed an increase in the proportion of older girls whose periods caused them trouble—just about half. More of them needed to go to bed for their menstrual difficulties (23%) and to take medication (27%).

Prevalence of Health Problems: Findings from Medical Examinations

The examining physicians noted more health problems among the 16-17 year old adolescents than among the 12-15's. Increases occurred especially in vision and eye problems, up from 21 per cent among 12-15 year olds to over 30 per cent among the older adolescents; lung and bronchial problems, which increased to 10 per cent among older boys and 11 per cent among older girls; skin problems, up to 23 per cent among the older (compared to 7% among the younger boys and 17% of younger girls); nervous and emotional problems increased for both boys and girls: 17 per cent of older boys compared to 6 per cent of younger, 20 per cent of older girls compared to 11 per cent of younger; anemia, which was found among 15 per cent of the older girls; gynecological problems, including pregnancy, increased among the older girls. Additionally, in reports to the nurse, more older girls indicated a vaginal discharge between periods (24%), that they always have a lot of pain with periods (33%), and that they have a heavy loss of blood with their periods (47%).

Drug Use Among Older Adolescents

As indicated earlier, adolescents were not questioned directly about their own drug use during the personal home interviews. However, during the second year of the study physicians at the medical examination noted when a young person showed evidence of drug use (needle marks, powder trace, etc.).[2] While less than one per cent of the 12-15 year olds were observed with any such evidence, thirteen per cent of the older boys and nine per cent of the older girls were observed by the physicians as presenting indications of drug use. These data are reported because of the increase they indicated in use of drugs among older adolescents rather than as estimates of the prevalence of drug use *per se*.

Overall Health Status

Using the number of reported health problems as an index of health status, both personal interview and medical examination findings point to an increase in health problems among the older adolescent.

Considering first the information from *personal interview*, the proportion of boys reporting two or more health problems rose from 47 per cent among the younger to 56 per cent among the older; the mean number of heatlh problems they reported increased from 2.2 to 2.9. Among girls, the proportion reporting two or more health problems rose from 64 per cent of the younger to 71 per cent of the older adolescents; the mean number of health problems girls reported rose from 3.5 among younger girls to 4.3 among the older girls. (Table V-4)

Change with age was even more marked in the findings from the *medical examination*, but these findings need to be viewed with the possibility of some effects of "selection bias." On examination, the proportion of boys observed to have two or more health problems (or significant deviations from what the physicians considered normal) was 53 per cent among the 16-17 year olds, while it was 30 per cent among the younger boys. The mean number of health problems that the physicians noted was 1.57 among older boys compared to 1.04 among the younger. Among the girls, at ages 16-17 there were 60 per cent with as many as two or more health problems compared to 37 per cent of the younger girls. The mean number of physician-noted health problems rose to 1.78 among the older girls compared to 1.32 among the younger. At ages 16-17, only 27 per cent of the boys and 13 per cent of the girls who were examined were judged by a physician to be free of any significant deviation from the normal. (Table V-5)

Utilization of Medical Services: Reported in Personal Interviews

Generally, utilization of services for treatment of medical problems increased among both the older adolescent boys and girls. For example, 52 per cent of the 16-17 year old boys reported at least one medical condition for which a physician had been consulted compared to 37 per cent of the younger boys; 62 per cent of the older girls compared to 52 per cent of the younger reported at least one condition for which they had consulted a physician (Table VIII-1). Older boys were more likely than the younger to have visited a physician in the six months prior to interview: the proportions were 65 per cent of the older boys but only 49 per cent of the younger. The same was true for girls: 61 per cent of the older girls reported a doctor visit within the six months prior to interview compared to 44 per cent of the younger. The increase in the prevalence of vision problems with age was noted earlier; this was accompanied by an increase in the number of boys who had eyeglasses: 50 per cent of the older compared to 28 per cent of the younger boys. Thus the increase in medical problems among the older adolescents was accompanied by an increase in utilization of health services. However, there were no differences between older and younger adolescents in getting preventive checkups.

What about the kinds of medical services used? Older boys were *less* likely than younger boys to report a "usual source" of medical care (51% of the older and 34% of the younger boys reported that they had *no* usual source of care). No such difference existed among older girls, and, if anything, older girls were somewhat *more* likely than younger girls to have a usual source of medical care. Older girls (33%) were more likely than older boys (12%) to report having a private physician. Older youths who had a usual provider of medical care, boys especially, were more critical of the care they received (33% of the 16-17 year old boys compared to 17% of the younger; 20% of the older girls compared to 11% of the younger rated the care they received "fair" or "poor").[3]

Needs for Medical Care: Findings from Medical Examinations

Despite increased utilization of medical services by older adolescents, their unmet needs for medical care were even greater than those of younger adolescents. The proportion of examined youths who required referral for care rose to 63 per cent of the older boys (up from 45% of the younger). The mean number of conditions referred for care was 1.00 among older boys, compared to .69 among younger boys. Older girls presented more unmet needs for medical care than older boys as well as more than younger girls: 69 per cent of the older girls had at least one condition which required referral for medical care, compared to 54 per cent of the younger girls. The mean number of conditions for which older girls required referral was 1.31, compared to .85 among younger girls and 1.00 among older adolescent boys. (Table X-1)

Another way of estimating the relative needs for medical care of the older adolescents is to look at those young people who were referred for medical care for two or more conditions and note their distribution by age and sex compared to the distribution of all examined adolescents (Table XI-1). This comparison shows that girls (especially those 16-17 years old) were over-represented among those with two or more referrals for care.

The increase in need for medical care is progressive through the adolescent years. Table XI-2 presents the referral patterns for the total number of medical problems noted by the examining physicians.

Table XI-1—Distribution of Adolescents Referred for Care for Two or More Medical Conditions Compared to the Distribution of all Examined Adolescents

	Two or more referrals	All examined adolescents
Boys	44%	52%
12-13 yrs. old	17%	26%
14-15 yrs. old	19	20
16-17 yrs. old	8	6
Girls	56	48
12-13 yrs. old	16	21
14-15 yrs. old	23	18
16-17 yrs. old	17	9

Summary

The evidence is clear that health problems increased between the earlier and later years of adolescence. What adolescents reported in their interviews, no less than the physicians' findings at the examination, showed more health problems among 16-17 year old adolescents, and more among girls than boys. Utilization of health services was in some ways better among the older; e.g., more of the older

Table XI-2—Physician Notations about Referral Requirements

	Black Youth					
	Boys			Girls		
	12-13 (129)	14-15 (96)	16-17 (30)	12-13 (103)	14-15 (91)	16-17 (45)
Mean number of conditions not requiring referrals	.27	.28	.53	.33	.40	.42
Mean number of conditions already under treatment	.12	.03	.03	.10	.12	.04
Mean number of conditions requiring referrals	.61	.79	1.00	.76	.96	1.31
Mean number of all conditions noted*	1.00	1.10	1.57	1.18	1.47	1.78
* Means of all conditions differ from summed means because of rounding.						
Mean number of referrals for further investigation (not counted above)	.30	.11	.13	.27	.22	.33

than younger adolescents had seen a physician in the six months before their interview.

Few older boys had a private physician; half had no regular source of medical care. This may have been one reason why their performance in keeping follow-up appointments for the care recommended at the medical examination was better than others'.

Unmet needs for medical care, like the prevalence of health problems, are directly correlated with age. Among both boys and girls needs for care increased in each successive two-year age group. Older girls needed the greatest number of referrals for care.

Chapter XII

Dental Problems and Dental Care

Reference was made earlier (Chapter V) to the high prevalence of dental problems among adolescents in Harlem. Both the information obtained from personal interviews and findings from dental examinations document the extent of such problems; they are the most prevalent of all health problems in this population. Personal interviews provided additional information about dental practices, utilization of dental services, and attitudes toward dental care. These are discussed in this chapter. Included, also, is a comparison of dental health among older and younger adolescents. Some implications of these findings for the delivery of dental services are discussed at the conclusion of the chapter.

Dental Status and Needs for Dental Care

Information from Personal Interviews

Data from the personal interviews revealed that many adolescents in this community are dissatisfied with the condition of their teeth. General ratings of the overall condition of *teeth* were considerably lower than comparable ratings of health in general. About half (49%) of all 12-15 year olds rated the condition of their teeth as either "fair" or "poor." This is a considerably greater proportion than rated their general health this way. Boys were more dissatisfied than girls: among the former, 54 per cent said their teeth were in "fair" or "poor" condition, and among the latter the proportion was 43 per cent.

One in five youths (22% of boys and 15% of girls) considered the condition of their *gums* "fair" or "poor." One-third reported that they "sometimes" or "often" have trouble with their teeth or gums. Boys and girls reported this trouble just about equally. Equal proportions of 12-15 year old boys and girls, about four in ten, also reported that at least one permanent tooth had been broken or pulled.

One per cent of the youths were using orthodontic braces at the time of the interview; a similar proportion had used them formerly. Nearly one out of five thought their teeth needed straightening. Boys and girls showed little difference.

Findings from Dental Examinations

About two-thirds of the youngsters who received the dental examination were given an oral health rating of only "fair" or "poor" by the examining dentist; one in eight was rated "poor." Among boys, almost three-quarters (72%) were rated "fair" or "poor"; fewer, but still more than half, of the girls (54%) received a rating of "fair" or "poor" on their oral health.[1] (Table XII-1)

Correspondence Between Self-Reports in Personal Interviews and Findings from Dental Examination

Two findings emerged quite clearly from both the personal interviews and the dental examinations: ratings of adolescents' dental health are poorer than those of their physical health; the condition of teeth and gums among 12-15 year old boys is poorer than that of girls this age.[2]

Needs for Dental Care: Findings from Dental Examinations

In terms of referrals that the dentist suggested for the youngster after his examination, 86 per cent were felt to need a dental referral for at least one condition, 60 per cent for two conditions, 41 per cent for three, and 13 per cent were noted as needing referrals for as many as four different dental conditions.

Decay was the condition for which youngsters most often were referred; eight in ten youths required such referral, boys and girls just about equally.

More than half the youths, three out of five of the boys, required referral for oral hygiene. Boys, similarly, more often needed a referral for gingivitis or periodontal disease than girls did.

Girls, on the other hand, required referrals slightly more often for malocclusion than boys, 27 per cent and 20 per cent, respectively. (Table XII-2)

Dental Health Practices: Reported in Personal Interviews

Judging from the replies to questions tapping conceptions of health and salient health practices and the absence of references to teeth and tooth care among them, dental health does not rank high among adolescents' health concerns.

Direct questions in personal interviews about tooth care showed that nine in ten youths brushed their teeth daily: 93 per cent at least once a day; 50 per cent two or more times a day; 10 per cent three or more times a day.

Table XII-1—Dentist Ratings of Oral Health (from Examinations)

	Black Youth 12-15 Years								
	Both Years			Study Year 2			Study Year 1		
	All (395)	Boys (209)	Girls (186)	All (200)	Boys (111)	Girls (89)	All (195)	Boys (98)	Girls (97)
Excellent	5%	2%	8%	6%	3%	10%	4%	1%	6%
Good	31	26	38	25	20	32	38	33	43
Fair	51	58	43	57	64	48	44	50	38
Poor	13	14	11	12	13	10	14	16	13

Table XII-2—Dental Status and Needs for Dental Care (from Examinations)

	Black Youth 12-17 Years				
		12-15 years		16-17 years	
	All (395)	Boys (209)	Girls (186)	Boys (29)	Girls (45)
Oral health rating of fair or poor	64%	71%	54%	55%	65%
Referral for:					
two or more dental conditions	59	60	59	26	49
decay	81	82	80	60	78
gingivitis or periodontal disease	40	45	34	17	22
oral hygiene	55	61	49	27	36
malocclusion	23	21	26	7	18
No dental referral given	14	12	15	33	20

Girls were somewhat more likely than boys to be regular and frequent teeth brushers. Almost one in ten youths (7%) reported no regular daily pattern of tooth brushing.

The most usual time for tooth brushing was the morning; just about all who brushed their teeth daily brushed them in the morning. Fewer than half of all the 12-15 year olds, but girls (52%) more than boys (39%), brushed their teeth in the afternoon or evening. About one in eight replied that he brushed his teeth after meals.

Youngsters were questioned as to their knowledge and information about the cause of dental caries. Practically all (85%) offered a comment that related eating sweets to tooth decay, girls (92%) more than boys (80%). Fewer than half (43%) related *not* brushing teeth to decay, and girls were also more likely to say this than boys. Only one in fifty referred to not seeing the dentist as something causing tooth decay. About one in twenty youths could not mention any cause of tooth decay.

Utilization and Attitudes Regarding Dental Services: Reported in Personal Interviews

Two major components of the utilization of health services are their availability and attitudes toward using them. On both these counts a prediction could be made that dental services have been relatively poorly utilized in this population. This turned out to be the case. Compared with reported utilization of medical services, and in view of the extent of unmet need for dental care as measured by the number of dental referrals made at the examination, dental services have been insufficiently utilized. One-third of the 12-15 year olds reported a visit to a dentist within six months prior to the interview. Somewhat better than half (57%) had visited a dentist within one year of their interview. These rates were slightly below their reported frequency of dental visits: two-thirds said they usually saw a dentist at least once a year; four in ten said that they usually saw a dentist twice a year; seven per cent reported that they had never seen a dentist. (Although not strictly comparable, data from the National Health Survey on children's dental visits are worth noting here. In 1964-65, 55 per cent of all Americans 5 to 14 years of age had seen a dentist within less than a year and 25 per cent had never seen a dentist. In 1968, while the number of dental visits per person per year was 1.8 for white children 5 to 14, among nonwhites it was 0.6; National Center for Health Statistics, 1971b.)

In Harlem approximately one-third of the 12-15 year olds said they had no usual place for dental care—a proportion similar to that reporting no usual source of medical care. Slightly more boys than girls lacked a usual source of dental care. Two in five reported having a private dentist (a proportion higher than the number with a private physician) and, as in the case of medical care, slightly more girls than boys received dental care in a private office.[3] Approximately one in ten used a dental clinic, and an even smaller proportion received dental care from a New York City Health Department station. Schools reportedly arranged for more dental care than medical care. Approximately one-quarter of the 12-15 year olds reported that their last dental appointment had been made by their schools; almost two-thirds said their parents had made the arrangements; and one in twenty said he had made his own dental appointment.

Overall, one-quarter said they visited dentists for preventive checkups; girls were more likely than boys to report that they do so (34% and 18%, respectively). Three out of five youngsters reported that they had had their teeth cleaned in a dentist's office, slightly more girls than boys. A somewhat higher proportion—approximately seven out of ten—said they had had their teeth X-rayed. Among youngsters who were *not* seeing a dentist as often as twice a year, approximately 60 per cent of the total sample, slightly more than half, said they would like to see a dentist more often.

Some comparisons between the utilization of dental services and medical services are shown in Table XII-3.

With regard to attitudes toward care, youngsters were asked whether they preferred seeing a dentist in a private office or in a clinic, matching the question they had been asked about seeing a physician. The proportions preferring dentists in private offices were quite like the preferences regarding physicians: better than half preferred a dentist in a private office, slightly more than a quarter preferred a clinic, and about one in seven had no preference.

This preference for private dental care was based on shorter waiting time, the dentist's spending more time with patients, and liking some aspect of the treatment itself.

Preferences for dental clinics were based on considerations of superior equipment and facilities, superior treatment and care, liking to have other people around, and familiarity. Almost one in ten cited the cost of a private dentist. One youngster explained his preference for a dentist in a clinic in the following way: "Because in a private office they joke and it's not funny."

The attitude of young people toward using dental services is signified in other data from this study. When expressing their likes and dislikes in the medical examination, the second most frequently mentioned dislike, after the blood test, was the dental examination. On personal interview, 122 youngsters aged 12-15 years who did not visit a dentist twice a year and did not want to, either, were asked why. Half said they were afraid of going to the dentist. Among the somewhat larger number who did not see the dentist twice a year but said they would like to (164 youths), 13 per cent said the reason they did not go was that they were afraid and/or that "the dentist hurts." This suggests the extent to which young people associated pain with dental care.

Dental Health Among Older Adolescents

The only dental problem reported in *personal interviews* in which older adolescents differed noticeably from younger was the proportion with teeth that had been broken or extracted: 52 per cent of the older boys (up from 39% of 12-15 year old boys) and 61 per cent of the older girls (up from 38% of 12-15 year old girls) had at least one tooth that had been broken or extracted.

On *dental examination* the teeth and gums (especially gums) of the older boys were observed to be in considerably better condition than the younger boys' and better also than those of the older girls. This is in contrast to what was found among 12-15 year old boys, who had more dental problems—periodontal and oral hygiene—than girls. Among girls, the age difference in the needs for dental care was not as great as among boys, but the direction of the difference was the same (Table XII-2).

Despite the difference between younger and older adolescents, the dentist still rated oral health among more than half of the older adolescents as only "fair" or "poor." Half of the older girls and a quarter of the older boys were given referrals for at least two different kinds of dental conditions. Referral for decay was required by four out of five older girls and three out of five boys; one in three girls and one in four boys needed an oral hygiene referral; one in five needed periodontal referral; a smaller proportion needed referral for malocclusion.

These findings relating to dental conditions among older adolescents deserve further comment. From what was observed about their *medical* problems, an increase in dental problems would have been expected. It did not occur; indeed, the opposite was true. Data from the dental examinations showed that the greatest number of dental problems occurred earlier in adolescence.

The marked drop in dental problems, particularly among the older examined boys, was not expected and it is not clear what accounts for it. Among the interviewed, the older and younger adolescents did not differ noticeably in dental problems (except for broken and extracted teeth, which were more common among the older) nor in their utilization of dental services (recency of last dental visit, preventive checkups, and usual source of care). One explanation is a modification in the hypothesis of "selection bias" in the examined sample suggested earlier: if older boys with better patterns of utilization came to the examination more often than boys of the same age who have poorer patterns of utilization, this could account for the improvement that was observed in dental status.[4] But this begs the question of why older youths needed to be referred for more *medical* problems. All that can be stated with some certainty is that age differences with regard to dental problems were contrary to what had been observed for medical problems. At least in this population, dental problems peaked in early adolescence.

Summary

Dental health poses a special problem for the delivery of health services to this population. Nearly nine out of ten of the examined 12-15 year old youths required referral for dental care. In contrast to the findings about medical care, boys exceeded girls in their needs for dental care. Again, in contrast to their needs for medical care, needs for dental care were greater among the 12-15 year olds than among the older adolescents. There was less utilization of dental services than of medical services. However, neither dental health nor dental care appeared to be salient in these youngsters' health concerns.

Table XII-3—Utilization of Dental and Medical Services Compared (from Personal Interviews)

	Black Youth 12-15 Years	
	Dentist	Physician
Saw within past year	57%	70%
Saw within past 6 months	32%	47%
Ever get checkup	25%	30%
Ever get checkup (boys only)	18%	28%
Do not want to see *dentist twice a year**	43%	
Do not want *annual medical checkup*†		9%

* Asked of those who do not see a dentist twice a year.
† Asked of those who do not receive annual physical examinations.

Chapter XIII

Some Implications

This research was intended as a contribution to the improvement of health care for adolescents. However, as social scientists, the authors do not feel qualified to draw a blueprint for the delivery of health services. What we hope is that this report will prove useful for those who *are* engaged in planning and delivering such services.

Certain experiences in conducting this study and a number of its findings suggest at least some of the directions that should be taken in planning the delivery of health care to young people. It is the *more important of these experiences and findings* which will be discussed here. This chapter is not a summary of the many detailed findings presented earlier—that was done in the first chapter—but rather a discussion of broader policy implications.

These implications have to do primarily with (1) adolescent interest in and motivation for getting preventive care, (2) how, where, at what age, and by whom such care may best be provided, and (3) what kinds of services are needed.

The high rate of participation by adolescents, both in the household interview and in the medical examination phases of the project, reflects their interest and concern regarding health matters—as well as that of their parents and the community in which they live. The general implication here is that there is considerable motivation on the part of youngsters themselves and their families to obtain at least the preventive care which the examination represented.

But if the planners of health care delivery are to benefit from this study, it is necessary to go beyond such generalizations. Data reported earlier show an increase in the number of reported and observed health problems from the 12-13 age group to the 16-17 year old age group. Furthermore, these data show that younger adolescents are more likely to participate in medical examinations of the type provided in Harlem than are older adolescents—who are more likely to have competing demands on their time, less subject to parental influence, and apparently less motivated to get preventive care.

This amounts to a double argument for providing such care as early in adolescence as possible. Indeed, age 12 should be viewed not as the *earliest* but the *latest* age at which preventive care will effectively reach youngsters and achieve its purpose. This raises the question of priorities. In the health care of adolescents, should stress be placed on preventive care in view of what it may promise for future health, or should stress be given to remedial care to cope with the many current health problems which now limit functioning? These are not mutually exclusive approaches—*both* are needed. Presumably, there would be a payoff from improved preventive health care for adolescents in reducing illness and its consequences later in life. Also to be considered are the resources available to provide such services—a matter to which we shall return later.

Whether preventive or remedial, what kinds of services are needed? The variety of health problems presented by adolescents in Harlem and the numbers of youngsters with multiple problems (e.g., one in three of those examined had two or more significant medical problems, aside from dental conditions; one in five needed referral to care for two or more of them, despite a relatively high volume of physician visits) points to the advantage of planning for comprehensive health services where dental, vision, respiratory, skin and speech problems—to name but a few—can all be treated in the same place.

Where such services may best be provided is still another matter. The medical examinations in this project were conducted by appointment in the Ambulatory Care Service of Harlem Hospital after regular clinic hours; careful scheduling and rescheduling of appointments contributed to the high participation rate. But while such a hospital is perhaps best equipped for complex diagnosis and treatment, it should not necessarily be inferred that all the care adolescents need can only be delivered through a hospital.[1] Many of the things that were done in the examination might have been performed elsewhere—e.g., in a neighborhood health center, or even in school. Preventive examinations and care of adolescents in particular would appear to fit very well into plans for organizing health care in such a way as to keep people *out* of hospitals and to reach them where they are.

Related here is the question as to whether adolescents are best served by health care facilities aimed at them alone. While this idea may have appeal in relatively more affluent—or deviant—communities, there was little evidence from the interviews conducted in Harlem of a preference for such age-specific services. At least in this community, the family services approach seems compatible with the attitudes of young people themselves as well as contributing to effective treatment of their problems.

As to those involved in delivering care to adolescents, the attitudes toward and interest in young people on the part of health workers should be a primary consideration in selecting staff. The favorable response of most youngsters in Harlem to their examination experience may be attributed largely to the attitudes and behavior of the staff which conducted the examination.[2] Adolescents are interested in their bodies and body changes and also in the process of the examination itself. Time spent in explaining such matters to young people contributes both to their health education and to their acceptance of health care. Still another feature of this project was the employment of nonprofessional health aides—in this case household interviewers—who explained in advance what the medical examination would be like and also personally arranged the appointment for the examination with the adolescent.

No less important, in our view, is the issue of community participation and support. Our experience demonstrates that working actively and not just *pro forma* with community representatives is important in health programs which aim to reach the greatest number of young people with the care they need.

The role of the schools in health education and

health care also needs to be considered here. Schools could be doing more than at present to provide adolescents with the knowledge and information which they want and need about growth and development and about the services available for their health problems. Schools are, in addition, a logical place to screen for educationally disabling conditions, such as vision impairment. Equally important, they can follow up on youngsters referred for care. While some schools serving the Harlem community have undertaken innovative programs to deal with such problems, data presented in this report indicate that much remains to be done.

The problem of dental care—needed more than anything else—presents special difficulties. Harlem is extremely limited in its resources for providing youngsters with such care. But attitudes toward dental care may also be a barrier to providing adequate dental health services. For example, almost half of the youngsters who do not see a dentist with a recommended frequency of twice a year do not want to see him any more often than they do now; only about a quarter of the adolescents visit a dentist for preventive checkups. Pain is a salient feature in perceptions of dental care. Indeed, dental care needs are so pervasive as to require restructuring the delivery of dental services. Since early adolescence appears to be a peak time for dental problems, perhaps dental examinations such as those provided in this study should be given in schools, with adequate provision for follow-up care and the means of getting youngsters to that care—e.g., using school aides as escorts.

Adolescents in Harlem present many needs for health care which have so far remained unmet. We have considered here some ways of meeting those needs. We are not necessarily recommending that all adolescents should be given the extensive interviewing and examination which this project provided; the costs are considerable. But in Harlem, neither in school nor outside are there adequate or adequately utilized facilities with which to determine such unmet health care needs—let alone to deal effectively with them. This is essentially a matter of scarce resources and of the necessity of allocating such resources as are available to what decision makers in health affairs consider more serious health problems—e.g., drug abuse. In this respect, the health care "system" of Harlem is probably not unique; most communities—including some of the more affluent ones—have tended either to concentrate on dramatic problems or to neglect the basic health needs of their adolescents.

This may be changing, however. The residents of Harlem and many other communities are increasingly insistent that they receive the full range of health care which they need. As the effort to meet such demands proceeds—whatever forms it takes—data from studies such as this can provide a useful base for measuring changes in health and health care at future points in time.

APPENDIX

Appendix A: Medical and Interviewing Staffs

Harlem Hospital Examination Staff

Daisy A. Allman, Dr. Ivan R. Ashtine, Dorothy Beazer, Leon Bishop, Leroy Bowen, Richard Brown, Dr. Joel Callins, Helena Cathey, Elena DeMichele, Louis Edgehill, Vera Elliott, Audrey Francis, Dr. Lyra Gillette, Joy Gray, Inez Henry, Betty Hill, Nadine Jean-Louis, Mary T. Jones, Dr. Carol Ann Leal, Dr. Yung Wham Lee, Dr. Paul Martin, Marie M. Moore, Dr. Steven Mills, Dr. Linda A. Randolph, Dr. Raymond W. Ransom, Dr. Laurencia Regalado, Clara Russell, Henry Sanders, Ronald Stackhouse, Dr. Ray N. Taylor, Walter Taylor, Dr. Bhatrahally K. Venkatesh, Dr. Erroll Williams, Fitzgerald Wilson-Turner.

Medical Consultants at Harlem Hospital

Dr. C.R. Amarosingham, Director, Department of Clinical Chemistry; Dr. H. Butts, Department of Psychiatry; Dr. E. Davis, Director, Department of Psychiatry; Dr. C. Felton, Department of Medicine; Dr. E. Kahn, Department of Pediatrics; Dr. T.W. Roberts, Director, Department of Pathology; Dr. H. Straker, Department of Dermatology; Dr. D. Swartz, Department of Obstetrics-Gynecology; Dr. E.A. Thompson, Director, ENT; Dr. J. Wesley, Department of Medicine; Dr. M. Wilking, Department of Psychiatry; Dr. A.C. Williams, Director, Department of Dentistry; Dr. E. Winocúr, Director, Department of Audiology.

Interviewers

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Appendix B: Sample Selection

The sample of adolescents for this study was drawn from a representative cross section of households in Central Harlem which had been interviewed in the Community Health Survey.[1] The households had been selected by means of a multi-stage probability sampling design. Each year, one out of twenty-five households was drawn. The sample in the Community Health Survey thus constituted an annual four per cent sample of all housing units in Central Harlem, which was divided into twelve representative monthly subsamples.

The adolescent health study used samples of housing units from the first two years of the larger community health survey.[2] All youngsters in each household were listed who would

Table B-1—Ethnic, Sex, and Age Distribution of Total Sample, Interviewed Sample and Medically Examined Sample, 1968-69 and 1969-70 Samples Combined

	Eligible*		Interviewed		Interviewed and Examined	
	N	Per cent	N	Per cent	N	Per cent
Total	907	100.0	752	100.0	556	100.0
Black (non-Spanish)	800	88.2	668	88.8	497	89.4
Boys	419	46.2	349	46.4	256	46.0
12-13	186	20.5	162	21.5	129	23.2
14-15	166	18.3	135	18.0	97	17.4
16-17†	67	7.4	52	6.9	30	5.4
Girls	381	42.0	319	42.4	241	43.3
12-13	158	17.4	133	17.7	104	18.7
14-15	135	14.9	112	14.9	91	16.4
16-17†	88	9.7	74	9.8	46	8.3
Other (Spanish background)	107	11.8	84	11.2	59	10.6
Boys	48	5.3	38	5.1	24	4.3
12-13	23	2.4	19	2.5	15	2.7
14-15	15	1.7	12	1.6	5	.9
16-17†	10	1.1	7	0.9	4	.7
Girls	59	6.5	46	6.1	35	6.3
12-13	29	3.2	19	2.5	14	2.5
14-15	21	2.3	19	2.5	16	2.9
16-17†	9	1.0	8	1.1	5	.9

* Source: The Harlem Community Health Survey.

† Included in the second study year only. Figures for 12-15 year olds are based on two years of data collection; those for 16-17 year olds on only one year.

be, at the time of interview, no less than a month away from their twelfth birthday and no more than one month beyond their sixteenth. The study was expanded in the second year to include 16 and 17 year olds (who were not represented in the first study year). In the second year's sample, therefore, the upper age limit was the eighteenth birthday.[3]

In the first study year (1968-69), 349 youths aged *12-15*, inclusive, residing in 258 households, were assigned for interviews. In the second year (1969-70), 558 youths aged *12-17*, inclusive, residing in 349 households, were assigned to the study. The two study years together produced a total eligible sample of 907 youths, approximately nine in ten of whom were black and not from Spanish-speaking backgrounds; the remainder were from Spanish-speaking families. Their age, sex, and ethnic distributions are presented in Table B-1 (eligible sample).

Also shown in Table B-1 are these same distributions for the sample with whom interviews were completed and the sample that was examined at Harlem Hospital, in addition to being interviewed. The high degree of correspondence in the distributions for all three groups—eligible, interviewed and examined—indicates the extent to which the completed samples are representative of the initial listed (eligible) sample.[4]

In each study year, personal interviews were completed with 83 per cent of the listed sample, providing a total of 752 obtained interviews. Among *black adolescents* aged *12-15* years who were not from Spanish-speaking families,[5] interview completion was 85 per cent in the first study year and 84 per cent in the second year. The total interview completion among 12-15 year old black youth was 84 per cent, with no difference in the completion rate of boys and girls. Among 16 and 17 year olds, who were interviewed only in the second year of the study, interview completion amounted to 78 per cent among boys and 84 per cent among girls. These completion rates are presented in Table B-2.

Interview completion rates were examined for differences with regard to a number of background variables. As to mother's educational attainment, there was a tendency for better completion among adolescents whose mothers had *not* completed high school than among those whose mothers had more education. This was particularly true among adolescent girls: 87 per cent who had mothers with less than a complete high school education were interviewed, compared to 75 per cent of girls with mothers who had more education. Among boys the rates were 86 per cent and 80 per cent, respectively. Girls whose families were on welfare tended to show a higher interview completion rate than girls from families not receiving welfare assistance (90% and 79%, respectively). The difference among boys, though in the same direction, was small (87% and 82%, respectively). Girls with southern-born mothers were more likely to complete the interview than those whose mothers were born in New York City (87% and 76%, respectively). Again, the difference in interview completion rates among boys was in the same direction but only amounted to five per cent, a difference easily attributable to random sampling fluctuation.

Thus, although some demographic differences in interview completion appeared, they were neither consistent across sex groups nor were they large. Given the high interview completion rate that was achieved, no identifiable bias appears to have been introduced by any one of these variables.

The rate of interview completion during the two study years, 83 per cent, was high for a community in a central city. The 17 per cent who were not interviewed were accounted for as follows: refusal, 7 per cent; moved and not located, 4 per cent; out of area, 5 per cent; never at home after five or more attempts, 1 per cent.

Considerable time, effort and resources were spent in locating and completing as many cases as possible. This can be seen most clearly, perhaps, in Table B-3, which indicates the number of personal contacts interviewers made in order to complete the interviews assigned to them.

Table B-3—Number of Contacts Required to Complete Interview

	(709)*
ONE	22%
TWO	21
THREE	21
FOUR	10
FIVE	9
SIX or more	17

* Based on complete interviews only. Some of this information was missing and 43 of the 752 interviewed cases could not be used in this tabulation.

Appendix C: Notes about Statistical Inference

Notes about Statistical Inference

Since this study is based on a *sample* of adolescents, the data are subject to sampling variability. Differences between figures (percentages usually, but also means or any other measure) from two groups in the sample may or may not represent actual differences between the groups in the full population. Estimates of sampling variability with which to judge the statistical reliability of percentages are presented in Table C-1. These are the percentage differences needed to be confident that the observed difference is statistically reliable, that a difference this large would occur by chance in no more than 5 samples out of 100.

Table B-2

SAMPLE SIZE
(Black Youth Only)

		12-15 years		16-17 years	
	All	Boys	Girls	Boys	Girls
Number listed	645	352	293	67	88
Number interviewed	542	297	245	52	74
With exam	421	226	195	30	46
Without exam	121	71	50	22	28
SAMPLE COMPLETION					
Proportion interviewed	84%	84%	84%	78%	84%
With exam	65%	64%	67%	45%	52%
Without exam	19	20	17	33	32

The first column of percentages in the table represents the amount by which the two groups must differ when their percentages are at the approximate 50 per cent level in order for the differences to be considered statistically significant (with 95% confidence). The second column of percentages is the same measure for values at the approximate 20 (or 80) per cent level. For example, if the value shown in the table for the 50 per cent level for two groups is 10 per cent and the two groups have sample values of 48 per cent and 54 per cent for the same characteristic, the difference (6%) is not significant; if the sample values are 44 and 58 per cent, the difference (14%) is a significant one.

These values were computed from the standard formula for simple random sampling:

$$S.E. = \sqrt{\frac{P_1Q_1}{N_1} + \frac{P_2Q_2}{N_2}}$$

where S.E. stands for standard error of the percentage difference between group 1 and group 2, P_1 is the percentage with the characteristics in group 1, $Q_1 = 100\text{-}P_1$, and N_1 is the base on which P_1 is calculated. The table values are twice the standard errors of the difference.

It should be understood that the sample in this study was not a simple random sample, but a systematic probability one. Depending on the particular variable in question and on the underlying distribution of this variable in the population, there may or may not be a reduction in the standard error by using a systematic sample. Usually for studies of this nature, we can expect some modest improvement (reduction) in the standard errors with a systematic sample. However, because two or more adolescents often came from the same household, there is a clustering effect due to the intra-class correlation between the members of the same household. The size of the intra-class correlation, of course, depends on the characteristic in question: in virtually all real cases, it serves to increase the standard error of a single percentage; however, it may reduce the standard error for differences between two groups if the adolescents from multiple adolescent households tend to split into the two groups rather than fall jointly into one group or another.

Table C-1—Estimates of Sample Variability

	When percentages are at level: 50%	80%
Interviewed **(Black Sample only)**		
Boys *vs.* girls (12-15 years)	±9	±7
Boys *vs.* girls (16-17)	18	14
Boys: 12-15 *vs.* 16-17	15	12
Girls: 12-15 *vs.* 16-17	13	11
Examined (Black Sample only)		
Boys *vs.* girls (12-15 years)	10	8
Boys *vs.* girls (16-17)	23	19
Boys: 12-15 *vs.* 16-17	19	16
Girls: 12-15 *vs.* 16-17	16	13

Table C-2—Siblings in Interviewed Sample

	Two study years combined	First year	Second year
(No. families)	(404)	(194)	(210)
One youngster in study	71%	71%	71%
Two youngsters in study	24	25	23
Three youngsters in study	5	4	5

The proportions of 12-15 year old black youths with varying numbers of siblings in the interviewed sample are shown in Table C-2.

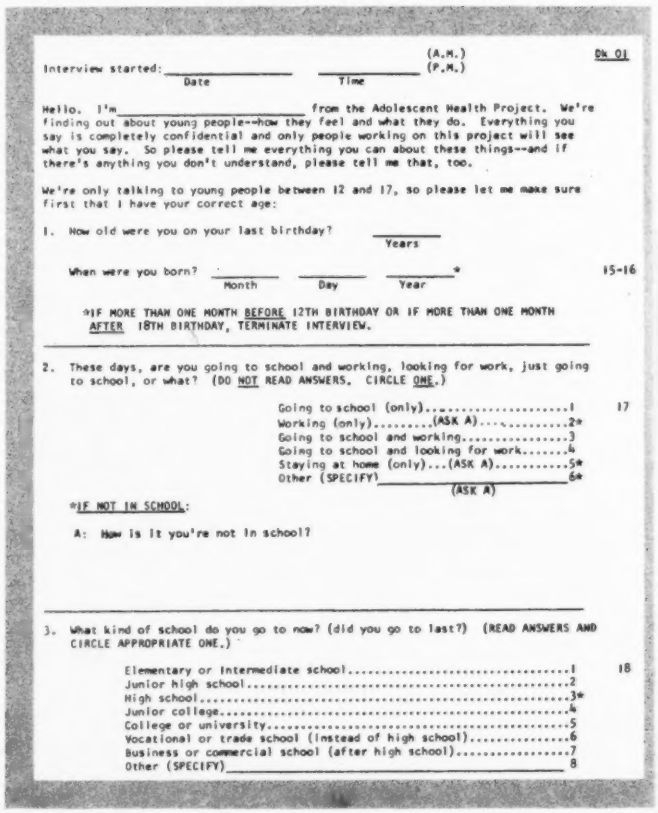
Appendix D: Percentage Equivalents of Proportions

Percentage Equivalents of Proportions

1 in 3 approximately 33%
1 in 4 approximately 25
1 in 5 approximately 20
1 in 6 approximately 17
1 in 7 approximately 14
1 in 8 approximately 12
1 in 10 approximately 10
1 in 12 approximately 8
1 in 14 approximately 7
1 in 20 approximately 5

Appendix E

Following is the schedule of questions especially prepared for use in the home interviews with adolescents:



Interview started: _____ (A.M.) _____ (P.M.) DK 01
Date Time

Hello. I'm_____ from the Adolescent Health Project. We're finding out about young people--how they feel and what they do. Everything you say is completely confidential and only people working on this project will see what you say. So please tell me everything you can about these things--and if there's anything you don't understand, please tell me that, too.

We're only talking to young people between 12 and 17, so please let me make sure first that I have your correct age:

1. How old were you on your last birthday? _____ Years

When were you born? _____ Month _____ Day _____ Year* 15-16

*IF MORE THAN ONE MONTH BEFORE 12TH BIRTHDAY OR IF MORE THAN ONE MONTH AFTER 18TH BIRTHDAY, TERMINATE INTERVIEW.

2. These days, are you going to school and working, looking for work, just going to school, or what? (DO NOT READ ANSWERS. CIRCLE ONE.)

Going to school (only).....1 17
Working (only).....(ASK A).....2*
Going to school and working.....3
Going to school and looking for work.....4
Staying at home (only)...(ASK A).....5*
Other (SPECIFY)_____6*
(ASK A)

*IF NOT IN SCHOOL:

A: How is it you're not in school?

3. What kind of school do you go to now? (did you go to last?) (READ ANSWERS AND CIRCLE APPROPRIATE ONE.)

Elementary or intermediate school.....1 18
Junior high school.....2
High school.....3*
Junior college.....4
College or university.....5
Vocational or trade school (instead of high school).....6
Business or commercial school (after high school).....7
Other (SPECIFY)_____ 8

Q. 3. cont'd — Dk. 01

*IF HIGH SCHOOL: A. What diploma are (were) you working for? What course are (were) you taking?

(READ CATEGORIES IF NECESSARY AND CIRCLE ONE.)

Technical	2	19
General	3	
College preparatory, academic	4	
Business or commercial	5	
Trade, vocational, or industrial arts	6	
Other (SPECIFY)_____	7	

4. Is (was) the school you go to (went to last) a public school, a parochial school, a private school (not a parochial school) or what?

Public	1	20
Parochial	2	
Private, not parochial	3	
Other (SPECIFY)_____	4	

5. What is (was) the name (number) and address of the school you go to? (went to last?)

6. In school, what grade are you in now? (IF NOT IN SCHOOL: What was the last grade you completed?)

(DO NOT READ ANSWERS. CIRCLE ONE CODE IN FIRST COLUMN)

7. How much schooling or education would you like to have? (before you stop?) (DO NOT READ ANSWERS. CIRCLE ONE IN SECOND COLUMN) — 21-26

	Q6 Grade in now (Last completed)	Q7 Would like	Q8 Think will get
5th grade or less	01	01	01
6th grade	02	02	02
7th grade	03	03	03
8th grade	04	04	04
9th grade, high school freshman	05	05	05
10th grade, high school sophomore	06	06	06
11th grade, high school junior	07	07	07
12th grade, high school senior	08	08	08
Some college	09	09	09
Complete 2-year college	10	10	10
Complete 4-year college	11	11	11
Graduate school or more	12	12	12
Other (SPECIFY)_____	13	13	13

Dk 01

13. What are some of the things you do that are good for your health? (PROBE: Any other things you do that are good for your health?)

14. And do you do anything that is not good for your health? (What else?) (Tell me about it.)

15. How often do you think about your health--often, sometimes, or do you hardly ever think about your health?

Often	1*	34
Sometimes	2*	
Hardly ever or Never	3	

A. *IF "OFTEN" OR "SOMETIMES": What do you think about?

16. Most of the time, is your health very good, is it pretty good, is it fair, or is it poor most of the time?

Very good	1	35
Pretty good	2	
Fair	3*	
Poor	4*	

*IF "FAIR" OR "POOR": What do you mean? (Why do you think it is "fair"/"poor"?)

17. Do you think you are healthier than most kids your age, not as healthy as most of them, or do you think that your health is just about the same as most kids your age?

Healthier than others	1	36
Not as healthy as others	2	
About the same	3	

18. About how tall are you? (PROBE TO NEAREST INCH) — 37-39

_____ Feet

_____ Inches

Dk 01

8. Why would you like to have _____ (REFER TO Q.7 ANSWER)? (DO NOT READ ANSWERS. CIRCLE ALL THAT RESPONDENT MENTIONS.)

To get a good, good paying job	1	27
Need it to qualify for the work or job I want	2	
I want to be an educated person	3	
I want or need to be self-supporting soon	4	
I need, will need, to support my family	5	
Parent(s) say I should	6	
Radio, TV says I should	7	
To stay out of draft	8	
Other (SPECIFY)_____		

9. You've told me how much schooling you'd like to have. Now, please tell me how much you think you will get? CIRCLE ONE CODE IN LAST COLUMN OF ANSWER BOX, P. 2)

A. IF ANSWER DIFFERENT FROM Q. 7: Why do you think you may not get through _____ (Q. 7 ANSWER)?

10. Thinking back, about how many different schools have you gone to since you started the first grade? (PROBE: How many elementary schools? How many junior high schools, etc?) — 28-29

_____ No. schools

11. How do you feel about the marks you get (got) in school--are they as high as you'd like them to be, or would you like to be getting (to have gotten) higher marks?

As high as like	1	30
Would like higher	2*	

*A. What keeps (kept you from getting higher marks? (DO NOT READ ANSWERS. CIRCLE ALL THAT RESPONDENT MENTIONS.)

I don't try, work, study enough, I fool around	1	31-33
Some of the work is too hard--I'm bad in some subjects	2	
Other kids are noisy, bother or distract me	3	
I am absent a lot, miss the work	4	
Other (SPECIFY)_____	5	

12. Now let's talk about health. How would you describe a healthy person? (PROBE: What is a healthy person like?)

Dk 01

19. And how do you feel about how tall you are? Do you feel you are: READ CATEGORIES AND CIRCLE ONE.

Much too tall	1	40
A little too tall	2	
About right	3	
A little too short	4	
Much too short	5	

20. And about how much do you weigh? PROBE TO NEAREST POUND. — 41-43

_____ Pounds

21. When did you weigh yourself last? (DO NOT READ ANSWERS. CIRCLE ONE.)

Within past two days	1	44
Three days up to 1 week ago	2	
More than 1 week, up to 1 month ago	3	
More than 1 month, up to 6 months ago	4	
More than 6 months ago	5	

22. And how do you feel about your weight? Do you feel you are: READ CATEGORIES AND CIRCLE ONE.

Very overweight	1	45
Slightly overweight	2	
About the right weight	3	
Slightly underweight	4	
Very underweight	5	

23. In the last month (of school), how many days were you absent or sent home because you were sick? — 46-47

_____ days sick

24. And in the past school year, about how many days of school did you lose because you were sick? — 48-49

_____ days sick

25. a) Does your health limit the amount of time you spend at school each day? — Yes 1, No 2 — 50

b) Does your health cut down on the kinds of things you can do at school? (like climbing stairs, taking gym) — Yes 1, No 2 — 51

c) Because of your health, do you go to a special school? — Yes, Special School 1, No, Special School X* — 52

*IF NO SPECIAL SCHOOL:

d) Because of your health are you in a special class in school? — Yes, Special Class 2 SPECIFY_____; No Special Class or School 3

Dk 01

26. Sometimes people have something they want to do, but they just don't feel well enough to do it. How often does that happen to you--that there's something you want to do but you just don't feel well enough to do it? Does that happen a lot of the time, some of the time, only once in a while, or does that never happen to you?

A lot of the time.....1 — 53
Some of the time.....2
Once in a while.....3
Never.....4

27. Is there any one place where you usually go for medical care? IF "YES": Where is that? (CIRCLE ONE and write in name and address where?).

No one usual place....GO TO Q. 29.....1 — 54
Yes, Harlem Hospital clinic.....2* ASK A
" Other hospital clinic...(SPECIFY).....3*
" Harlem Hosp. emergency room.....4*
" Other Hosp. emergency room.(SPECIFY)..5*
" Doctor's private office...(SPECIFY)...6*
" City Health Center.....(SPECIFY).....7*
" Other place.....(SPECIFY).....8*

Name
(Indicate whether Doctor or Clinic)

Address

UNLESS NO ONE USUAL PLACE:

*A. And what do you think of the care you get there? Would you say it is excellent, good, fair or poor? — 55

Excellent.....1
Good.....2
Fair.....3
Poor.....4

28. IF HAVE USUAL PLACE THAT IS NOT PRIVATE DOCTOR, ASK: And is there any one doctor that you usually see when you go there? — 56

Yes.....1
No.....2

29. When was the last time you saw a doctor--not a dentist? (DO NOT READ ANSWERS. CIRCLE ONE. EXCLUDE INPATIENT HOSPITAL CARE.) — 57

During past week.....1* ASK A
One, less than two weeks ago.....2*
Two weeks, less than six months ago.....3*
Six months, less than one year ago.....4*
One, less than two years ago.....5*
Two, less than three years ago.....6*
Three, less than five years ago.....7*
Five or more years ago.....8*
Never have seen or talked to a doctor.....0

*A. Who made the arrangements for you to see the doctor then? (CIRCLE ONE) — 58

Self.....1
Parent.....2
School, School Dr..3
Other..(SPECIFY)...4

Dk 01

30. Do you ever go to a doctor for a checkup, when there is nothing special wrong with you? — 59

Yes.....1* (ASK A)
No.....2 (GO TO Q. 31)

*A. IF YES: And about how often do you go to a doctor for a check-up when there is nothing special wrong? (DO NOT READ ANSWERS. CIRCLE ONE.) — 60

More than twice a year....1
Twice a year.....2 (GO TO Q. 32)
Once a year.....3
Every two years.....4
Less than every two years..5 (ASK Q. 31)

31. IF NO YEARLY CHECKUP: Would you like to get a health check-up every year? — 61

Yes...1 (ASK A & B)
No....2 (ASK C)

IF WOULD LIKE YEARLY CHECK-UP: (ASK A and B)

A. How is it that you don't get one every year?

B. How often would you like to get a health check-up?

C. IF WOULD NOT LIKE YEARLY CHECK-UP: Why not?

32. During the past year, did you have an examination by a doctor in school? — 62

Yes..(ASK A-C).....1
No..(GO TO Q.33)....2

A. How many times? (In the past year?) — 63-64

WRITE NUMBER

B. The last time, did the doctor tell you to go anywhere or to do anything? (DO NOT READ ANSWERS. CIRCLE APPROPRIATE ONE.) — 65

No.....(GO TO Q. 33).....0
Sent to family doctor.....1
Yes, Sent to outpatient hospital clinic.....2
Yes, Sent to Health Department clinic.....3
Yes, School doctor himself told me what to do...4
Yes, Other (SPECIFY)_____5

C. And did you (go there) (do it)? — 66

Not yet, plan to.....1
Yes.....2*
No.....3

D. *IF YES: Does the doctor or nurse at school know what happened? — 67

Yes.....1
No.....2

Dk 01

33. Thinking back over the past year, about how many times have you seen a doctor for a check up or because you were not feeling right? — 68-69

Write No.

34. Was there any time during the past year when you wanted to see or talk to a doctor but you did not?

Yes...(ASK A - C).....XX
No....(GO TO Q. 35).....00

A. About how many times during the past year would you say that happened? — 70-71

Write No.

B. What was wrong?

C. Why didn't you see (talk to) a doctor then? (PROBE: Is there anything else that ever keeps you from seeing a doctor?)

35. What are some of the things you'd like to talk over with a doctor, if you had the chance to ask him anything you wanted?

36. What things do you like about doctors?

37. What things don't you like about doctors?

38. In general, when you're not feeling well, do you usually see a doctor right away, or do you wait a while to see if it will go away, or do you usually put off seeing a doctor as long as you possibly can? — 72

See doctor right away.....1
Wait a while.....2
Put off as long as can.....3

78-80/901

Start Dk 02

39. And if you had your choice, would you rather see a doctor in a clinic or in a private office? — 9

In a clinic.....1
In a private office.....2
Don't care.....3

ASK EVERYONE: A. Why?

40. What do you see as some of the biggest health or medical problems for young people like yourself living around here? (PROBE: Any other health or medical problems around here?)

41. In school, do you ever have trouble seeing the blackboard? — 10

Yes.....1*
No..(GO TO Q. 42).....2

*IF "YES": A. When do you have that trouble? (PROBE: Where do you sit when you have trouble seeing?)

B. For about how long have you had that trouble? (DO NOT READ ANSWERS. CIRCLE ONE) — 11

Less than one year.....1
One year, less than two years.....2
Two years, less than three years.....3
Three years, less than five years.....4
Five or more years.....5
Don't know; Not sure.....6

42. Do you wear eyeglasses or contact lenses? — 12

Yes.....X (ASK A-D)
No.....1 (GO TO Q. 43)

IF "YES": A. Which do you wear?

Wear glasses only.....2
Wear contact lenses only.....3
Wear both glasses and lenses.....4
Glasses, but lost them.....0

B. Are you supposes to wear them all of the time or only some of the time? — 13

All of the time.....1 (ASK C)
Some of the time.....2 (ASK C&D)

C. Do you actually wear them all of the time (that you're supposed to)? — 14

Yes.....1
No.....2

D. IF "SOME OF THE TIME" OR B: When are you supposed to wear them? (DO NOT READ ANSWERS. CIRCLE ALL THAT APPLY.) — 15

For seeing at a distance.....1
For reading.....2
For TV.....3
Something else (SPECIFY)_____4

ASK EVERYONE: Dk 02

43. Is there anything wrong with your eyes (except what is corrected by your glasses or contact lenses)? 16
Yes.....1 (ASK A)
No.....2

IF "YES"
A. What? Anything else?

43XX. IF "NO" ON Q. 42 (DOES NOT WEAR GLASSES) AND "YES" ON Q. 41 or 43 (DOES HAVE SOME PROBLEM SEEING), ASK:
How is it that you don't wear glasses?

---

44. When did you last have your eyes checked? (DO NOT READ ANSWERS. CIRCLE THE ONE THAT APPLIES.) 17
Less than one month ago.....1
One month, less than six months ago.....2
Six months, less than one year ago.....3 (ASK A-B)
One, less than two years ago.....4
Two or more years ago.....5
Never.....7 (GO TO Q. 45)

A. And where did you last have your eyes checked? (DO NOT READ ANSWERS. CIRCLE ONE.) 18
Private office.....(SPECIFY BELOW).....1*
Harlem Hospital Clinic.....2
Another Hospital Clinic..(SPECIFY BELOW).3*
In school.....4
In City Health Center..(SPECIFY BELOW....5*
In another place....(SPECIFY BELOW.....6*
*NAME_____
*ADDRESS_____

B. And who made the arrangements for you to have your eyes checked then? (DO NOT READ ANSWERS. CIRCLE ONE.) 19
Self.....1
Parent.....2
Someone at school.....3
Other (SPECIFY).....4

---

45. Do you have any kind of nervous or emotional trouble? Yes.....1 (ASK A-D) No.....2 (GO TO Q. 46) Dk 02 20

IF HAVE NERVOUS OR EMOTIONAL TROUBLE:

A. What is the trouble?

B. Does it interfere with your (school) work? IF "YES": Would you say a great deal or somewhat? 21
No, doesn't interfere.....1
Yes, interferes great deal.....2
Yes, interferes somewhat.....3

C. For about how long have you had that trouble? (DO NOT READ ANSWERS. CIRCLE ONE.) 22
Less than one year.....1
One year, less than two years.....2
Two years, less than three years.....3
Three years, less than five years....4
Five or more years.....5
Don't know; Not sure.....6

D. Have you ever gone for help for this trouble? Yes.....1 (ASK E-G) No.....2 (GO TO Q. 46) 23

E. When did you last to for help for this trouble: (DO NOT READ ANSWERS. CIRCLE ONE.) 24
Less than one month ago.....1
One month, less than six months ago..2
Six months, less than one year ago...3
One, less than two years ago.....4
Two or more years ago.....5
Never.....7

UNLESS NEVER:

F. Where did you go? (DO NOT READ ANSWERS. CIRCLE ALL THAT APPLY.) (WHEREVER *, SPECIFY NAME AND ADDRESS BELOW) 25-29
Private office....(SPECIFY.....1*
Harlem Hospital Clinic.....2
Other Hospital Clinic....(SPECIFY)..3*
School.....4
In-Hospital patient...(SPECIFY).....5*
Other.....(SPECIFY.....6*
*NAME_____
*ADDRESS_____

UNLESS NEVER:

G. And who sent you there (for help)? (DO NOT READ ANSWERS. CIRCLE ALL THAT APPLY.) 30-32
Self.....1
Parent.....2
School.....3
Other.(SPECIFY)..4

Dk. 02

46. Now, some questions about your teeth. All in all, would you say your teeth are in excellent condition, good condition, fair condition, or poor condition? 33
Excellent.....4
Good.....3
Fair.....2
Poor.....1

47. How about your gums? Would you say they are in excellent condition, good condition, fair condition, or poor condition? 34
Excellent.....4
Good.....3
Fair.....2
Poor.....1

48. Is there any one place you usually go to see a dentist? IF "YES": Where? 35
No.....0
Yes, private office.....1*
Yes, City Health Center.....2*
Yes, dental clinic.....3*
Yes, a hospital clinic.....4*
Yes, at school.....5
Yes, another place (SPECIFY).....6*
*NAME_____
*ADDRESS_____

49. When did you last go to a dentist? (DO NOT READ ANSWERS. CIRCLE ONE.) 36
Less than one month ago.....1
One month, less than six months ago...2
Six months, less than one year ago....3 (ASK A & B)
One, less than two years ago.....4
Two or more years ago.....5
Never.....7 (GO TO Q.55)

A. Was that just a single visit or part of a series of visits? Single visit.....1 Part of a series.....2 37

B. Who made the arrangements for you to see the dentist then? (DO NOT READ ANSWERS. CIRCLE ONE.) 38
Self.....1
Parent.....2
School.....3
Other(SPECIFY).4

DK 02

50. Do you ever go to a dentist just for a check-up when there is nothing bothering you? 39
Yes.....1
No.....2

51. Have you ever had your teeth cleaned in a dentist's office or clinic? Yes.....1 No.....2 40

52. Have you ever had your teeth X-rayed? Yes.....1 No.....2 41

53. About how often do you go to the dentist (usually)? (DO NOT READ ANSWERS. CIRCLE ONE.) 42
More than twice a year.....1
Twice a year.....2
Once a year.....3*
Every two years.....4* (ASK A-C)
Less than every two years.(SPECIFY)....5*

*IF LESS THAN TWICE A YEAR:

A. Would you like to see a dentist more often? Yes.....1 (ASK B) No.....2 (ASK C) 43

B. IF WOULD LIKE TO SEE DENTIST MORE OFTEN: How is it that you don't go more often? (DO NOT READ ANSWERS. CIRCLE ALL THAT APPLY.) 44-47
Can't afford it.....1
Nothing wrong, teeth don't bother me....2
Trouble getting appointment.....3
Scared, it hurts 4
Other (SPECIFY)_____ 5

C. IF WOULD NOT LIKE TO SEE DENTIST MORE OFTEN: Why not? (DO NOT READ ANSWERS. CIRCLE ALL THAT APPLY.) 48-51
Can't afford it.....1
Nothing wrong, teeth don't bother me....2
Trouble getting appointment.....3
Scared, it hurts.....4
Other (SPECIFY)_____ 5

---

54. If you had your choice, would you rather see a dentist in a clinic or in a private office? 52
Clinic.....1
Private office.....2
Don't care.....3

A. ASK EVERYONE: Why?

ASK EVERYONE — Dk 02

55. And how often would you say you have problems with your teeth or gums--like cavities, toothaches or bleeding gums--does that happen very often, sometimes, or hardly ever? — 53
Very often.....1
Sometimes.....2
Hardly ever.....3

56. Do you know what causes cavities in the teeth? (Anything else?)

57. When do you brush your teeth? (DO NOT READ ANSWERS. CIRCLE ALL THAT APPLY.) — 54-57
In the morning.....1
In the evening.....2
After meals.....3
Other..(SPECIFY).....4

A. How often do you brush them? _____ NO. TIMES — 58-59

58. Have you ever worn braces or bands on your teeth? IF "YES": Do you wear them now? — 60
Yes, wear them now.....1
Yes, used to wear them.....2
No, never wore them (ASK A)..3

A. IF NEVER WORE BRACES OR BANDS: Do you think your teeth need straightening? — 61
Yes.....1
No.....2
Not sure..3

59. Have any of your permanent (grown-up) teeth been broken or pulled out? (are any of your grown-up teeth missing?) — 62
Yes.....1*
No.....2

* IF "YES":
A. How many have been broken or pulled out? _____ — 63-64
B. And how many (of these) have been fixed or replaced? _____ — 65-66

78-80/902

Q. 60. Cont'd — Dk 03

During the past 12 months, have you had:	No	Yes	Past No.	A. WHEN SAW DR. LAST: 1-5 Mos Ago	6-11 Mos. Ago	1-2 Yrs. Ago	2+ Yrs Ago	D.K.	Never	B. MEDICINE: YES From Dr.	YES Not Dr.	NO
21. Hernia, rupture or swelling in the groin	1	X	3	4	5	6	7	8	9	1	2	3
22. Frequent constipation	1	X	3	4	5	6	7	8	9	1	2	3
23. Frequent diarrhea	1	X	3	4	5	6	7	8	9	1	2	3
24. Stomach pains	1	X	3	4	5	6	7	8	9	1	2	3
25. Stomach ulcer	1	X	3	4	5	6	7	8	9	1	2	3
26. Vomiting, feeling sick to your stomach	1	X	3	4	5	6	7	8	9	1	2	3
27. Indigestion, acid in the stomach	1	X	3	4	5	6	7	8	9	1	2	3
28. Blood in the bowel movement	1	X	3	4	5	6	7	8	9	1	2	3
29. Worms or parasites	1	X	3	4	5	6	7	8	9	1	2	3
30. Blood in your urine	1	X	3	4	5	6	7	8	9	1	2	3
31. Difficult, painful or frequent urinating	1	X	3	4	5	6	7	8	9	1	2	3
32. Wetting bed. IF "HAVE HAD" ASK: HOW OFTEN	1	X	3	4	5	6	7	8	9	1	2	3
Three or more times a week...77/1												
Once or twice a week..... 2												
Once or twice a month..... 3												
Less than once a month..... 4												
And have you ever had:												
33. Diabetes	1	X	3	4	5	6	7	8	9	1	2	3
34. Tuberculosis..(TB)	1	X	3	4	5	6	7	8	9	1	2	3
35. Anemia (thin blood)	1	X	3	4	5	6	7	8	9	1	2	3
36. Syphilis	1	X	3	4	5	6	7	8	9	1	2	3
37. Gonorrhea, clap	1	X	3	4	5	6	7	8	9	1	2	3
38. Polio	1	X	3	4	5	6	7	8	9	1	2	3
39. Rheumatic fever or St. Vitus Dance	1	X	3	4	5	6	7	8	9	1	2	3
40. Jaundice, hepatitis	1	X	3	4	5	6	7	8	9	1	2	3
41. Meningitis	1	X	3	4	5	6	7	8	9	1	2	3
42. Epilepsy, convulsions, fits, seizures	1	X	3	4	5	6	7	8	9	1	2	3
43. Permanent stiffness, or any deformity in foot, leg, fingers, arm or back?	1	X	3	4	5	6	7	8	9	1	2	3
Do you have any other conditions or troubles with your health now that we haven't mentioned?												
44. SPECIFY _____	1	X	3	4	5	6	7	8	9		2	3
45. SPECIFY _____	1	X	3	4	5	6	7	8	9		2	3

60. Now, I'm going to read you a list of conditions and health troubles young people sometimes have. I would like you to tell me, for each one, whether or not you have had it during the past year. The first one is frequent headaches--have you had repeated headaches during the past year?

IF "NO" CIRCLE 1 AND ASK ABOUT NEXT CONDITION
IF "YES", CIRCLE X ALONGSIDE THAT CONDITION

Start Dk 03 9-76

During the past 12 months, have you had:	No	Yes	Past No.	A. WHEN SAW DR. LAST: 1-5 Mos Ago	6-11 Mos. Ago	1-2 Yrs. Ago	2+ Yrs Ago	D.K.	Never	B. MEDICINE: YES From Dr.	YES Not Dr.	NO
1. Repeated headaches	1	X	3	4	5	6	7	8	9	1	2	3
2. Dizziness, fainting spells or blackouts	1	X	3	4	5	6	7	8	9	1	2	3
3. A problem with your speech	1	X	3	4	5	6	7	8	9	1	2	3
4. Repeated nosebleeds	1	X	3	4	5	6	7	8	9	1	2	3
5. Frequent colds	1	X	3	4	5	6	7	8	9	1	2	3
6. Repeated sore throats	1	X	3	4	5	6	7	8	9	1	2	3
7. Frequent earaches or discharge from ears	1	X	3	4	5	6	7	8	9	1	2	3
8. Trouble hearing	1	X	3	4	5	6	7	8	9	1	2	3
9. Repeated sinus trouble	1	X	3	4	5	6	7	8	9	1	2	3
10. Long lasting cough	1	X	3	4	5	6	7	8	9	1	2	3
11. Chest pains	1	X	3	4	5	6	7	8	9	1	2	3
12. Long lasting bronchitis (Chronic)	1	X	3	4	5	6	7	8	9	1	2	3
13. Asthma, wheezing	1	X	3	4	5	6	7	8	9	1	2	3
14. Short of breath even without exercise	1	X	3	4	5	6	7	8	9	1	2	3
15. Heart thumping hard or racing	1	X	3	4	5	6	7	8	9	1	2	3
16. Anything else wrong with the heart. SPECIFY _____	1	X	3	4	5	6	7	8	9	1	2	3
17. Shaking or trembling	1	X	3	4	5	6	7	8	9	1	2	3
18. Repeated backaches, or other trouble with your back or spine	1	X	3	4	5	6	7	8	9	1	2	3
19. A problem with your skin. SPECIFY _____	1	X	3	4	5	6	7	8	9	1	2	3
20. Hay fever or other allergy. SPECIFY _____	1	X	3	4	5	6	7	8	9	1	2	3

Q. 60, Cont'd — Dk 03

FOR EACH CONDITION ANSWERED "YES" (WHERE YOU HAVE CIRCLED CODE X) ASK A)-C):

A) When did you last see a doctor for _____, or haven't you ever seen a doctor about that?
IN THE ANSWER CHART ON pp. 15-16, CIRCLE ONE CODE FROM 3-9 ALONGSIDE THAT CONDITION.

B) Do you take any medication for _____? IF "YES": Did a doctor tell you to take it? — 9-76
IN THE ANSWER CHART ON pp. 15-16 CIRCLE ONE CODE FROM 1-3 in Section B. "MEDICINE."

C) IF "YES" ON B: And what medicine do you take for _____?
(WRITE IN BELOW, IDENTIFYING CONDITION BY ITS NUMBER.)

Condition	Medicine	Condition	Medicine

78-80/903

61. In the past year, from last (month) to now, have you had any serious accidents or injuries? — Start Dk 04 9
No, none.....0
Yes, ENTER NUMBER __*

AA. Did you have to stay out of school (work) a day or longer because of (any of these accident(s)? IF "YES": Which

ASK B-E ABOUT EACH ACCIDENT THAT KEPT OUT OF SCHOOL (WORK).

B. What part of your body did you hurt? PROBE: Did you break any bones? Which?

C. Did you lose consciousness as a result of any of these accidents or injuries? — 10
Yes.....1
No.....2

D. How did the first, second, third, etc., accident happen?
(DO NOT READ ANSWERS. CIRCLE ONE FOR EACH ACCIDENT. IF SAME CAUSE APPLIES TO MORE THAN ONE ACCIDENT, NOTE EXACT NUMBER ALONGSIDE CODE.)

— 11-13
In a fight.....1
Auto accident while in a car.....2
Auto accident, not in car.....3
Fall or other accident.....4
Other (SPECIFY) _____5

E. And where did the first, second, third, etc., accident(s) happen?
(DO NOT READ ANSWERS. CIRCLE ONE FOR EACH ACCIDENT. IF MORE THAN ONE IN SAME PLACE, NOTE EXACT NUMBER ALONGSIDE CODE.)

— 14-15
In home.....1
At school.....2
In park or playground.....3
In street.....4
Other (SPECIFY) _____5

Dk 04

ASK QNS. 62-66A OF GIRLS ONLY IF BOY, SKIP TO Q. 67

62. Now a few questions about your menstrual periods. Have you started menstruating--I mean having your periods? IF "YES": How old were you when you started? PROBE: Were you closer to your _____th (age reported) birthday or your _____th (next year) birthday?

No, never menstruated..00 (SKIP TO Q. 67)
Yes (ASK QNS. 63-66A)....._____ ENTER AGE 16-17

63. How many days do your periods usually last?

_____ No. of days 18

64. Are your periods regular--do they come at the same time each month?
Yes, regular.....1
No, not regular.....2 19

65. Do your periods cause you to: (CIRCLE YES OR NO FOR EACH)

	Yes	No	
a. Go to bed for a day or more.....	1	2	20
b. Stay home but not in bed.....	1	2	21
c. Go to sick room or nurse at school or work.....	1	2	22
d. Take medicine.....	1	2	23

66. Would you like to talk to a doctor about anything concerning your menstrual periods? IF "YES": What would you like to talk to him about? (DO NOT READ ANSWERS. CIRCLE ALL THAT APPLY.)
No, don't want to talk to doctor.....1 24-26
Yes, about menstrual pain.....2
Yes, why periods are irregular.....3
Yes, about something else.....4
(SPECIFY)_____

66A. Have you ever been pregnant?
Yes....ASK A, B and C.....X
No.....0

IF "YES", ASK A, B and C:

A. How many times have you been pregnant?
_____ Write Number

B. Please tell me what happened (each time you were pregnant)--did you give birth to a baby who is still living, did the baby die after he was born, was it a miscarriage, an abortion, or still birth? WRITE IN THE NUMBER OF BIRTHS OF EACH KIND BELOW:

	Number
Live baby, still living.....	_____
Live baby, now dead.....	_____
Miscarriage.....	_____
Abortion.....	_____
Stillbirth.....	_____

C. And about how old were you when you got pregnant (the first time)?

_____ Enter Age

ASK EVERYONE:

Dk 04

67. A. About how many times have you been at the clinic of Harlem Hospital?
_____ No. times 27-28

B. About how many times have you been at the Emergency Room of Harlem Hospital?
_____ No. times 29-30

C. How many times have you stayed overnight or longer at Harlem Hospital?
_____ No. times 31-32

D. From what you have seen or heard, what do you think of the Harlem Hospital--would you say it is excellent, good, fair, or poor?
Excellent.....1 33
Good.....2
Fair.....3
Poor.....4

E. And why do you think it is (excellent), (good), (fair), (poor)? (PROBE FULLY)

68. How many times in all have you stayed overnight or longer in any hospital? INCLUDE STAYS IN HARLEM HOSPITAL. (CHECK REPLY TO Q. 67C and if Q. 68 is LESS, PROBE FOR ACCURATE REPLY)
_____ No. times 34-35

69. And now I'd like to know what you think of the medical service at school. First the school doctor, would you say the care you get from the school doctor is excellent, good, fair, or poor?
Excellent.....1 36
Good.....2
Fair.....3
Poor.....4
Don't know.....5
Never went.....6

70. And how about the school nurse--would you say the care you get from the school nurse is excellent, good, fair, or poor?
Excellent.....1 37
Good.....2
Fair.....3
Poor.....4
Don't know.....5
Never went.....6

71. If you had your choice, would you rather discuss a question you have about your health with a doctor, with a nurse, or with someone else? IF "SOMEONE ELSE": Who? (DO NOT READ CATEGORIES. CIRCLE ONE)
Doctor.....1 38
Nurse.....2
Parent(s).....4
Other...(SPECIFY).....3
_____

Dk 04

72. If you could choose the doctor you go to for an examination, would you prefer a doctor who is a man, or a doctor who is a woman, or doesn't it matter?
Man.....1 39
Woman.....2
Doesn't matter.....3

73. Suppose you had your choice of a doctor who takes care of teenagers and young people only, compared to one who sees the whole family--would you prefer a doctor who takes care of young people only, or one who takes care of the whole family, or wouldn't that matter very much?
Doctor for young people only.....1 40
Doctor for family.....2
Wouldn't matter.....3

Here are some questions about sleeping:

74. At about what time do you usually go to bed on a weekday night during the school year? (CIRCLE EITHER P.M. OR A.M.)
_____ A.M.
_____ P.M. 41-42

75. And at what time of day do you usually get up on a weekday morning during the school year? (CIRCLE EITHER A.M. OR P.M.)
_____ A.M
_____ P.M. 43-44

76. A. Do you sleep in a bedroom, living room, or some other room?
Bedroom.....1 45
Living room.....2
Other..(SPECIFY).....3

B. How many other people sleep in that room with you?
_____ #People 46-47

77. Are you bothered by bad dreams or nightmares? IF "YES": Would you say often or sometimes?
Often.....1 48
Sometimes.....2
No, never.....3

78. Do you ever have any trouble going to sleep? IF "YES": Would you say often or sometimes?
Often.....1 49
Sometimes.....2
No, never.....3

79. Do you ever have any trouble staying asleep? IF "YES": Would you say often or sometimes?
Often.....1 50
Sometimes.....2
No, never.....3

Dk 04

80. Now, let's talk about eating. In general, would you say you don't eat enough, that you eat just about as much as you need to, that you eat a little too much, or that you eat much too much? (CIRCLE ONE.)
Not enough.....1* 51
About as much as need.....2
A little too much.....3
Eat much too much.....4

*A. Why don't you eat enough?

81. And would you say your appetite is poor, fair, good or too good?
Poor.....1 52
Fair.....2
Good.....3
Too good.....4

82. All in all, during any one day do you eat more in snacks or more in meals?
Eat more in snacks.....1 53
Eat more in meals.....2
Snacks and meals about the same.....3

83. Are you on any kind of special diet now--special things you have to eat or are not allowed to eat? IF "NO": Have you ever been on any special kind of diet?
Yes, special diet now.....1 (ASK A & B) 54
Not now, but used to be.....2 (ASK A & B)
Never on a special diet.....3

IF "NOW" OR "EVER" ON SPECIAL DIET, ASK A & B:

A. What kind of diet? (DO NOT READ ANSWERS. CIRCLE ONE.)
To lose weight.....1 55
Other health conditions.....2
Both weight & other health.....3

B. Who put you on it? (DO NOT READ ANSWERS. CIRCLE ONE.)
Doctor.....1 56
Self.....2
Both doctor and self.....3
Other (SPECIFY).....4
_____

Dk 04

84. A. On an average day, about how many: a. Cups of coffee do you drink?___ 57-58
b. Cups of tea do you drink?___ 59-60
c. Glasses of milk do you drink?___ 61-62
d. Cans of soda (pop) do you drink?___ 63-64
e. Glasses of water do you drink?___ 65-66

B. Do you ever have beer, wine or other alcoholic drinks?

Yes.....X
No.....0 (GO TO Q. 85) 67

IF YES, ASK C AND D:

C. What do you drink? PROBE: Anything else? (DO NOT READ ANSWERS. CIRCLE ALL THAT APPLY.)

Beer.....1
Wine.....2
Other alcohol...(SPECIFY)...4

D. FOR EACH DIFFERENT DRINK, ASK:

About how many _____do you drink in a day, usually?

No. per day: ___ ___ ___ ___ Kind of drink:_____ 68&77

IF NO DAILY AMOUNT, ASK: About how many_____do you have a week, usually?

No. per week: ___ ___ ___ ___ Kind of drink:_____

---

85. Do you smoke cigarettes? IF "YES": About how many cigarettes a day do you smoke (usually)? RECORD VERBATIM.

No, none.....00
Yes..(SPECIFY).....
_____
Daily Number
69-70

Now, I'd like to ask you a few questions about where you live.

86. How long have you lived in New York City? (DO NOT READ ANSWERS. CIRCLE ONE UNDER COLUMN 86 BELOW.)

87. How long have you lived in this neighborhood? (DO NOT READ ANSWERS. CIRCLE ONE UNDER COLUMN 87 BELOW.)

88. How long have you lived in your present building? (DO NOT READ ANSWERS. CIRCLE ONE UNDER COLUMN 88 BELOW.) 71-73

	86. New York City	87. Neighborhood	88. Present Building
a. Less than one year	1	1	1
b. One, less than two years	2	2	2
c. Two, less than three years	3	3	3
d. Three, less than five years	4	4	4
e. Five or more years, but not all my life	5	5	5
f. All my life	6	6	6

Dk 04

89. In the building where you live, how often is the garbage collected or burned? (DO NOT READ ANSWERS. CIRCLE ONE.)

Every day, 6 times a week.....1 74
Three times a week, every other day..2
Twice a week.....3
Once a week.....4
Other (SPECIFY)_____5

---

90. In the building where you live, is there usually enough heat in the winter time? Yes.....1 75
No.....2

---

91. In the building where you live, is there usually enough hot water? Yes.....1 76
No.....2
78-80/904

---

92. Now a different kind of question. In general, what sort of time are you having these days--not so good, pretty good, or a very good time? Start Dk. 05

Not so good.....1 9
Pretty good.....2
Very good.....3

---

93. And would you say most of the time you feel very happy, pretty happy, or not so happy?

Very happy.....1 10
Pretty happy.....2
Not so happy.....3

---

94. Do you ever worry about how well you're doing in school? IF "YES": Would you say you worry about that very often or sometimes?

Very often.....3 11
Sometimes.....2
No, never.....1

---

95. Some people worry a lot about what their lives will be like five or ten years from now and some people don't. Would you say you worry a lot about that, that you worry a little about it, or don't you worry about it at all?

Worry a lot.....1 (ASK A) 12
Worry a little.....2 (ASK A)
Don't worry at all..3

IF WORRY "A LOT" OR "A LITTLE":

A. What do you worry about? (PROBE: And why do you worry about that?)

Dk 05

96. How hard would you say it is for you to think about what you might be doing ten years from now--would you say that it's very hard for you, is it not so hard for you, or is it impossible for you to think about what you might be doing ten years from now?

Very hard.....1* (ASK A) 13
Not so hard.....2
Impossible.....3* (ASK A)

*IF "VERY HARD" OR "IMPOSSIBLE":
A. How about five years from now--would you say it's very hard for you, not so hard for you, or impossible for you to think about what you might be doing five years from now?

Very hard.....1 14
Not so hard.....2
Impossible.....3

---

97. Of course no one knows for sure, but what age do you guess you will live to?
_____Years 15-16

---

98. If you had your choice, what age would you want to live to? _____Years 17-19

IF NUMBER OF YEARS ANSWERED ON Q. 98 IS SMALLER THAN NUMBER OF YEARS ON Q. 97, PROBE:
You said you want to live to___and think you will live to___. What do you mean? (Why is that?)

---

99. Do you ever think about dying? IF "YES": Do you think about it often?

No, never.....1 20
Yes, often.....2*
Yes, sometimes.....3*

*IF "OFTEN" OR "SOMETIMES":
A. And have you ever thought about what you might die from? Yes....1** 21
No.....2

**IF "YES" ON A:
B. What do you think you might die from?

---

100. What do you think is the best time in a person's life--when he's a child, a teenager, a young adult, when he's middle-aged or when he's old?

Child.....1 22
Teenager.....2
Young adult.....3
Middle-aged.....4
Old.....5

---

101. Here's a different kind of question. Most people wish that they could change themselves in some way. Suppose you could change yourself in some ways. How much of yourself would you want to change--would you want to change a lot of things, a few things, or would you not want to change anything about yourself?

A lot of things.....3* (ASK A) 23
A few things.....2* (ASK A)
Not anything.....1

A. *IF "A LOT OF THINGS" OR "A FEW THINGS":
What are some of the things about yourself that you would want to change? (Anything else?)

Dk 05

102. Here's a question where I'd like you to put down your own answers. HAND YELLOW SHEET. It's a list of different ideas and thoughts people sometimes have. I'd like to know how you feel about each of them--how much you agree or disagree with them. I'll read the idea out loud and then you circle one of the numbers alongside it.
Circle 4 if you strongly agree with that idea
" 3 if you agree, but not strongly
" 2 if you disagree
and circle 1 if you disagree strongly.
For example: Spring is the best time of year - would you say you strongly agree with that, do you agree, do you disagree, or do you disagree strongly? (BE SURE RESPONDENT CIRCLES THE NUMBER THAT CORRESPONDS WITH HIS ANSWER. REPEAT ANSWERING INSTRUCTIONS, UNTIL RESPONDENT CAN FOLLOW THEM PROPERLY.) There are no right or wrong answers, so please just mark down how you really feel about these things.

	Strongly Agree	Agree	Disagree	Strongly Disagree	
a) Everytime I try to get ahead something or someone stops me.	4	3	2	1	24
b) I certainly feel useless at times.	4	3	2	1	25
c) Being healthy is mainly a matter of the way you look after yourself.	4	3	2	1	26
d) There is not much chance that people will really do anything to make this a better world.	4	3	2	1	27
e) Things usually turn out for me the way I want them to.	4	3	2	1	28
f) At times I think I am no good at all.	4	3	2	1	29
g) It's better to wait a while for a good thing than to take what you want right away.	4	3	2	1	30
h) I am able to do things as well as most other people my age.	4	3	2	1	31
i) No matter how careful a person is, he can expect a good deal of illness in his lifetime.	4	3	2	1	32
j) People like me don't have a very good chance to be successful in life.	4	3	2	1	33
k) People would sooner help others than look out for their own good.	4	3	2	1	34
l) I sometimes can't help wondering if anything is worthwhile anymore.	4	3	2	1	35
m) For success, good luck is more important than hard work	4	3	2	1	36
n) When you come right down to it, there's not much a person can do to keep from getting sick.	4	3	2	1	37

Dk 05

INTERVIEWER'S OBSERVATIONS FOR Q. 102

INTERVIEWER: HOW MUCH DIFFICULTY DID THE RESPONDENT SEEM TO HAVE IN UNDERSTANDING INSTRUCTIONS FOR THIS QUESTION? (CIRCLE ONE)

Great difficulty.....1
Some difficulty.....2
Hardly any difficulty...3 — 38

DID YOU HAVE TO REPEAT THE INSTRUCTIONS MORE THAN ONCE?
IF "YES": HOW MANY TIMES?

Did not repeat.....1
Repeated (ENTER NUMBER OF TIMES).....( ) — 39

HOW MANY OF THE ITEMS WERE DIFFICULT FOR HIM TO UNDERSTAND?

Just about all.....1
About half.....2
Only one or two (WHICH)_____3
None.....4 — 40

Dk 05

103. Now I want to ask you about what you want to be. If you could be anything you wanted, what would you most like to be? PROBE: What kind of job or career would you like most to have for your life's work? BE SURE TO PROBE FOR SPECIFIC WORK AND INDUSTRY.

104. How good do you think the chances are that you'll actually do this kind of work--would you say the chances are very good that you'll do this work, that the chances are not good that this is the work you'll be doing, or would you say you have about a 50-50 chance of getting to do this work?

Very good.....1
Not good.....2
50-50 chance.....3 — 42

105. About how many people do you know personally who do that kind of work?

None.....0
One.....1
Two.....2
Three or more.....3 — 43

106. How often do you change your mind about what you want to do--do you change your mind about that very often, do you change your mind about that only once in a while, or don't you ever change your mind about that?

Change very often.....3
Change once in a while..2
Don't ever change.....1 — 44

107. And how would you feel if you could not get to do (be)_____ (JOB MENTIONED IN Q. 103)? Would that be a great disappointment to you, some disappointment, or would you not be too disappointed at all?

Great disappointment....3
Some disappointment.....2
Not too disappointed....1 — 45

108. If you don't get the kind of work you want most, what possible reasons do you think there might be for your not getting that work? (Anything else?)

A. And what kind of work do you think you'll actually end up doing?

Dk 05

109. Young people sometimes wonder about when they'll marry, whom they'll marry--things like that. Do you ever think about it? IF "YES": Do you think about that often or sometimes?

No, never think about it.....1 (GO TO Q. 110) — 46
Yes, often.....2*
Yes, sometimes.....3*

*IF "OFTEN" or "SOMETIMES": ASK A-D:

A. How old would you like to be when you get married?_____Yrs. — 47-48
B. And at what age would you like to have your first child?_____Yrs. — 49-50
C. How many children would you like to have?_____ — 51-52
D. GIRLS ONLY: Do you expect to work after you get married: Yes.....1 / No.....2 — 53

110. Are you working at any paying job now?

Yes.....1
No.....2 — 54

IF WORKING NOW:

A. How many hours a week do you work?

_____ hours — 55-56

B. What do you do? (PROBE for job and industry.)

Now a different kind of question.

111. About how often do you have a personal problem that upsets you--does that happen very often, does it happen sometimes or are you hardly ever upset by a personal problem?

Very often....1
Sometimes.....2
Hardly ever...3 — 57

112. Do you feel you have as many close friends as you'd like to have, or do you think you would like to have more close friends?

Have as many as like to.....1
Would like to have more.....2 — 58

A. About how many close friends do you have?_____ — 59-60

113. Do you feel somewhat alone or apart, even among friends?

Yes.....1
No.....2 — 61

114. Would you say you usually can do what you like, that sometimes you can do what you like, or that you almost never can do what you like?

Usually can do what like.....1
Sometimes can do what like.....2* ASK A
Almost never can do what like....3* — 62

A. Who or what stops you from doing what you'd like? (DO NOT READ ANSWERS. CIRCLE ALL THAT APPLY.)

Brother/Sister.....1
Grandparent.....2
Friend(s).....3
Teacher(s).....4
Parent(s).....5
Other relative..(SPECIFY) _____.....6
Self.....7
Other..(SPECIFY)_____...8 — 63-65

Dk 05

115. Here are a few things that young people sometimes are concerned about. Please tell me, for each of them, if you are more likely to follow the ideas of your friends about that thing or if you are more likely to follow your parents' ideas about that thing.

First--how you spend money--would you be more likely to follow your friends' ideas about that or to follow your parents' ideas about that? READ ITEMS a-h.

	Follow Friends	Follow Parents	Decide Myself	Follow Someone Else*	
a) How you spend money	1	2	3	4	66
b) How you dress	1	2	3	4	67
c) Your haircut or hair style	1	2	3	4	68
d) The time you come home at night	1	2	3	4	69
e) When to go to the doctor	1	2	3	4	70
f) Which doctor or where you see the doctor	1	2	3	4	71
g) The kind of work you'll go into	1	2	3	4	72
h) How hard you study for school	1	2	3	4	73

*SPECIFY PERSON_____

116. Would you say that you spend most of your spare time alone, most of it with people in your family and relatives, most of it with 1 or 2 friends, or most of your spare time in a group of 3 friends or more?

Spend most alone.....1
Spend with family.....2
Spend with 1 or 2 friends.....3
Spend with 3 or more friends.....4 — 74

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Start Dk 06

117. About how many times a month do you do these things? READ a) - g) and CIRCLE ONE CODE FOR EACH

	NONE	1	2	3	4	5 OR MORE	
a) Go to the movies	0	1	2	3	4	5	9
b) Go to a sports event	0	1	2	3	4	5	10
c) Go to a library	0	1	2	3	4	5	11
d) Go to a community center	0	1	2	3	4	5	12
e) Go to church	0	1	2	3	4	5	13
f) Go to a park	0	1	2	3	4	5	14
g) Go dancing	0	1	2	3	4	5	15

118. Are there any magazines that you read just about every issue of?

Yes.....1
No.....2 — 16

IF "YES": Which magazines do you read?

119. During the past month, have you read any book not required for school?

Yes.....1*
No.....2 — 17

*IF "YES": What books have you read?

Dk 06

120. About how many hours a day, usually, do you watch TV? _____ hrs. 18

121. And about how many hours a day, usually, do you listen to the radio? _____ hrs. 19

122. Did you go out of town at all last summer? Yes.....1 (ASK A) No.....2 20

A. How long were you away? (ENTER NUMBER AND CHECK DAYS OR WEEKS) _____ Days ( ) Weeks ( ) 21-22

123. How often do your parent(s) punish you--often, sometimes or almost never? Often.....1 Sometimes.....2 Almost never.....3 23

124. Here's a different kind of question. How important is religion in your life--is it very important, fairly important, a little important, or would you say religion is not important in your life? (CIRCLE ONE.)

Very important.....1 24
Fairly important.....2
A little important.....3
Not important.....4

125. Do you belong to any club or organization or group that holds meetings? IF "YES": Which ones? _____ 25

126. In this interview we've talked about a lot of different health matters. Are there any things you'd like to have more information about?

Yes.....1 (ASK A) 26
No.....2

IF "YES": A. What things? (Anything else?)

Now, for statistical purposes only, I need to know your Social Security number, if you have one.

No Social Security No.....0
OR
Enter Social Security No _____ #

(INTERVIEWER'S OBSERVATIONS)
(To be filled in after leaving respondent)

Dk 06

1. Respondent's sex: Male.....1 Female.....2 31

2. Respondent's racial-ethnic group: (CIRCLE ONE). 32
Puerto Rican, White.....1
Other Spanish, White....2
Puerto Rican, Black.....3
Other Spanish, Black....4
Black.....5
White.....6
Other (SPECIFY) _____ 7

3. Grooming: Unusually clean, well-groomed, neatly dressed....1 Average.....2 Untidy, not clean.....3 33

4. Specifically, how would you rate the respondent with regard to:

	Good	Fair	Poor	
Complexion, skin condition*.....	1	2	3	34
Teeth.....	1	2	3	35
Hair.....	1	2	3	36
Build.....	1	2	3	37
Eyes.....	1	2	3	38

*Absence of acne and pimples

5. During the interview did respondant:

	Yes	No	
Stutter or show speech defect.	1	2	39
Have difficulty hearing.....	1	2	40
Have nervous tic or twitch....	1	2	41

6. Generally, did you have any difficulty in understanding this respondent's replies? Yes....1* No.....2 42

*What was the difficulty?

7. Generally, what was your impression of this respondent's intelligence? Above average....1* Average.....2* Slow.....3* 43

*What makes you think so?

8. How cooperative was the respondent? Very cooperative....1 Fairly cooperative..2 Not cooperative.....3 Hostile.....4 44

*Why do you think he was (very cooperative) (fairly cooperative) (uncooperative)?

That's all the questions I have. As part of this project, we're inviting the young people we have interviewed to come for a free medical examination.

The next examinations will be given on _____ (Day and Date) at _____ o'clock.

Can you come?

Yes_____. IF "YES": 1) FILL IN DATE & TIME ON REMINDER
2) READ REMINDER FORM TO RESPONDENT
3) GIVE REMINDER FORM TO RESPONDENT

No_____. IF "NO": When could you come? _____ (Day and Date)

IF "REFUSAL": Why won't you come? (RECORD VERBATIM. PROBE FOR ALL POSSIBLE REASONS AND CONDITIONS UNDER WHICH WOULD COME.) (AFTER INTERVIEW FILL OUT "NO APPOINTMENT FOR EXAM" FORM AND RETURN IT TO THE OFFICE IMMEDIATELY.)

IF "YES": What time do you get home from school? _____

IF ARRIVE HOME AFTER 3:30: What time do you get out of school? _____

Thank you very much for all your help. Please tell me what you thought of these questions I've asked you. (PROBE FOR WHAT PARTICULARLY LIKED OR DID NOT LIKE, AND ANY QUESTIONS WOULD RATHER NOT HAVE BEEN ASKED.)

TIME INTERVIEW COMPLETED: _____ 27-29

DATE: _____ _____ Interviewer's Signature

INTERVIEWER'S REPORT

(Fill in immediately after leaving respondent)

PLEASE DESCRIBE ANYTHING THAT WAS SPECIAL ABOUT THIS RESPONDENT OR THIS INTERVIEW SITUATION.

Did respondent want to terminate interview before it was finished? Yes.....1* No.....2 30

*At what point(s) and why?

Dk 06

9. Did respondent have trouble understanding any particular question?
IF "YES": Which questions? Yes.....1 No.....2 45

10. Did respondent have trouble answering any particular question? Yes.....1 No.....0 46
IF "YES": Which questions?

11. Did any questions embarrass respondent? Yes.....1 No.....2 47
IF "YES": Which questions?

12. Are there any questions which you do not think the respondent answered honestly? Yes.....1 No.....0 48
IF "YES": Which questions?

13. Generally, do you think these responses were honest and truthful? Yes.....1 No.....2 Not sure.....3

14. Was interview conducted in: English.....1 Spanish.....2 Other (SPECIFY)_____ 3 50

15. Who else was present during the interview? (RECORD RELATIONSHIP TO RESPONDENT AND HOW MUCH OF THE TIME PERSON WAS THERE.)

	All the time	Some	A Little	
1._____	1	2	3	51
2._____	1	2	3	52
3._____	1	2	3	53

16. Did child have any physical defect or body deformity? Yes.....1 No.....2 54
IF "YES": Describe

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Notes to Chapters

Chapter I

No references.

Chapter II

1. Evidence of such needs is provided by a report on a health screening during 1968-69 of youngsters in the I.S. 201 complex, an intermediate school serving Harlem and East Harlem. According to this report, "a problem of major significance to a large number of young people in the community is not reading, but serious deficiencies in vision and hearing, deficiencies which make learning even more difficult than it normally is." And further, "Of the 840 young people examined in one school, 239 had physical problems...Only 50 of this total of 239 had previously been identified by the routine screening procedures. Still fewer had ever been seen by follow-up clinics or been fitted with the proper prosthesis." (Wilson, 1970, p. 216)

Chapter III

1. Systematic analysis of the interrelationships among the three dimensions is now underway.
2. Selected findings from the medical examination of adolescents have already been made part of the final report of the Harlem Alliance for Comprehensive Health Planning to the New York City Mayor's Task Force on Comprehensive Health Planning, which was submitted on September 30, 1971.
3. Interviewers were recruited through employment and social service agencies, civic groups, churches, and housing projects, as well as from other survey research organizations. Special efforts were directed at recruiting inside the Harlem community.
4. Read according to standards of Greulich and Pyle (1959).
5. Dr. Naomi Richman, medical consultant to the project at the time, was responsible for developing the examination protocol and training a special staff at Harlem Hospital. An instruction manual was prepared and is available upon request, along with the medical protocol.
6. All procedures in this study, interview and examination, were reviewed and approved by a faculty committee of the Columbia University College of Physicians and Surgeons to insure that adequate safeguards were included for protecting the rights of human subjects and that appropriate steps were taken to secure informed parental consent where respondents were minors.
7. Some of the HES procedures were experimental, served different objectives, and seemed unsuitable for adolescents in Harlem. In Harlem certain procedures were added which were considered particularly important for screening this population, e.g., the Tine tuberculin test and blood analysis for sickling.
8. In all, 596 school records were abstracted at 92 different schools in New York City. (The most important reason for noncompletion, accounting for about 75 per cent of the incompleted cases, was failure to locate the records at designated schools.) No school refused to cooperate; essential to obtaining this cooperation was the signed parental consent for exchange of school information. In one case, obtaining cooperation from an experimental, community-controlled school required an hour's appearance before a regularly scheduled meeting of the community board for that school.
9. According to the 1970 Census figures for Central Harlem, there is almost perfect parity between 12-15 year old boys and girls and between the 12-13 and 14-15 year old groups. There is thus a small variation between the sample listed from the Community Survey and the current parameters of the universe.

Chapter IV

1. Additional analyses that bear on this question are currently underway, e.g., whether those who failed to appear for examination presented more or fewer health problems than those who were examined.

Chapter V

1. In this and the chapters that follow, only selected data have been presented in tabular form. A complete set of data tables is available upon request. Estimates of sampling error have been prepared and appear in APPENDIX C, the narrative description of the findings. APPENDIX D lists their percentage equivalents.
2. It is important to remember that findings from the medical examination do not represent the identical population as the interviewed but only four-fifths of them.
3. Because this was a diagnostic examination designed primarily to serve as a basis for referrals to further care, no reliability checks were made on physician's diagnoses, such as separate examinations of the same youngsters by two different physicians. Variability among doctors was observed, for example, in the average number of medical problems noted.
4. Acne was graded from *A Manual of Dermatology* by Donald M. Pillsbury (1942).
5. It is important to recall the distinctions between the way the data in Harlem were collected and the methods of the national health survey. These are self-reported estimates; the latter were reported by an adult for the child.
6. To be sure, an unweighted count of the number of health problems considered significant by examining physicians must be regarded as an approximate index of health, since not all of the observed conditions are equally serious.
7. Some of the sex differences in number of conditions are likely to be a result of inter-physician variability. In the first study year, one male physician examined two-thirds of the boys and he noted substantially fewer medically significant problems than two other physicians did with the young men they examined (two-thirds fewer). In the second study year boys were more evenly distributed among the physicians; this time this same physician noted only slightly fewer conditions than the other two physicians averaged together. The number of significant medical conditions noted in the second study year has the following distribution:

		Boys (119)	Girls (92)
Ages:	12-13 years	1.07	1.02
	14-15 years	1.36	1.40
	16-17 years	1.57	1.78

Chapter VI

1. The overall proportion of 36 per cent included four per cent who reported that their glasses were lost.
2. Among those whose menstrual periods had begun; 17 per cent of the 12-15 year old girls reported *no* menstrual cycle.

Chapter VII

1. This may be compared with findings from a survey of attitudes regarding drug abuse in New York State, which was conducted in 1968 with a sample of New York State residents 13 years of age or older for the state's Narcotic Addiction

Control Commission. According to that survey, drug use was perceived as the second ranking neighborhood problem by Negroes of all ages in New York City (it was mentioned by 59 per cent—second only to burglary); among respondents 13 to 16 years of age in New York City—white and Negroes combined—56 per cent perceived drug use as a major neighborhood problem (for this age group it took priority over other problems). Drug use was mentioned as a neighborhood problem almost three times as often by Negroes as by whites (Glaser and Snow, 1969).

2. According to information obtained from school records, one respondent, a 15 year old girl, died from an overdose of heroin in 1969.
3. The question was not asked directly, because that might have elicited a socially desirable reply. Instead, youngsters were asked their usual bedtime and rising time on weekdays, and the number of hours elapsed was computed from these reports.

Chapter VIII

1. These findings may well reflect conditions pertaining in Harlem during and prior to the period of the study (1968-70); it is possible that recent developments in the delivery of health care—e.g., the opening of a new Harlem Hospital building and other innovations—may change the patterns of utilization reported here.
2. Aside from other differences, the Harlem data are self-reported, that from NHS reported for the youngster by an adult member of the household.
3. Youngsters were not asked if they *wanted* to consult physicians about these problems, only if they *had* consulted them. Therefore, these are not a fully appropriate (i.e., valid) indicator of unmet needs for medical care.

Chapter IX

1. This may be stated more succinctly: U = f (av, at) where *U* represents utilization, *av* represents availability and *at* represents attitude. Utilization is expressed as a function (f) of availability of medical services and attitudes relating to them. Each of these components in turn might be specified further. This formulation is proposed as a means of clarifying issues; no attempt has been made to quantify it.
2. Adolescents' ratings of Harlem Hospital was almost identical to the ratings given in 1967-68 and 1968-69 by adults in the community household sample survey from which this sample was drawn.
3. There was a suggestive age difference on this question: among the older teenagers, the 16-17 year olds, more of both sexes stated a preference for a physician for young people: 49 per cent of the girls and 35 per cent of the boys.
4. With age, girls' preference for a nurse declined and for a physician increased.
5. The examination lasted 2-3 hours and was staffed by three physicians, three nurses, a radiologist, a dentist and a dental assistant, an X-ray technician, two laboratory technicians, three nurses' aides, a medical consultant and an administrative coordinator. Each session was organized to handle an average of twelve young people, with the flow of youngsters moving from one procedure to another supervised by a nurse and a physician coordinator so that waiting time at any point in the examination was held to a minimum.
6. At the conclusion of the second study year the examining staff also completed self-administered questionnaires which sought their reactions to the experience of examining adolescents and their recommendations for future adolescent services. The same types of behavior mentioned favorably by the examinees were recommended by the examining staff as important attributes of medical personnel who treat adolescents.
7. Staff reactions also suggested that the blood test should be explained ahead of time, especially its significance for identifying sickle cell anemia, the importance of which the community has become aware. The staff made recommendations about advance preparation or orientation of the youths before the examination and greater emphasis during the examination on health education which could follow naturally from the adolescents' interest in their physical well-being.

Chapter X

1. This assumes, of course, that the care being rendered was adequate. This relationship can be expressed by the formulation: $N_c = P_{pr} - U$, where N_c represents need for care, P_{pr}, the prevalence of health problems and U, utilization. The components of utilization were discussed in the preceding chapter; as noted there, such formulations as this are intended to clarify issues and no attempt has been made yet to quantify them from the data.
2. The relevant ratios are .09 to .76 among all 12-15 year olds, .08 to .69 for boys and .11 to .85 for girls.

Chapter XI

1. Consistent with the idea of selection bias were findings that, on interview, 16-17 year olds were more likely than younger adolescents to consider themselves healthier than their peers. On the other hand, they did report more health problems than their younger counterparts. Also, since participation in examination was lower among older boys than girls, one might expect the older boys who came to the examination to present more medical problems than the girls. But the reverse was actually true. Unless the medical disadvantage of older girls relative to boys is even greater than what was observed here, this would be a counter-indication of selection bias.
2. This was recorded on a separate page which was removed before the record was put into the hospital files.
3. The less satisfactory arrangements that older boys had for their medical care may be reflected in their better than average performance in keeping the referral appointments recommended for them at the medical examination: 62 per cent of the 16-17 year old boys kept their follow-up appointments at Harlem Hospital compared to 42 per cent of the younger boys. There was no comparable increase among the older girls.

Chapter XII

1. Since this seemed a high frequency of unsatisfactory ratings, a check was made to see whether these findings could be resulting from dentists' "bias," i.e., a tendency for one dentist generally to judge the condition of the teeth more critically than another might. The ratings from the two study years, with different dentists conducting examinations, were compared. Although ratings in the second year were poorer than in the first, in both years ratings of "fair" and "poor" outnumbered "excellent" and "good"; also, proportionately more boys received "fair" and "poor" ratings than girls in each of the study years. Thus, the high frequency of unsatisfactory dental ratings did *not* appear to be simply an artifact of the examination procedure (Table XII-1).
2. Among 6-11 year old children nationwide, a similar disadvantage was observed for Negro boys relative to Negro girls in the number of DMF (decayed, missing or filled) among permanent teeth; this runs counter to the difference for white children (National Center for Health Statistics, 1971b).
3. Harlem Hospital does not provide regular dental services; only oral surgery is available. Thus the higher use of private dentists is undoubtedly due to the nonavailability of dental services from other sources, such as clinics.
4. This hypothesis will be tested by comparing the interview reports of utilization behavior in the examined and non-examined samples.

Chapter XIII

1. At the time the project began, there was no other place in Harlem where the examinations could have been done. But

recent innovations in the organization of community health services outside of hospitals may present attractive alternative arrangements for such examinations—in Harlem and elsewhere as well.

2. The medical staff, in turn, reported that they had gained new awareness of the responsiveness of young people to medical care.

Appendix B

1. Conducted for three years (1967-70) by the Harlem Hospital Center Department of Patient Care and Program Evaluation, headed by Professor Jack Elinson. The Community Health Survey is directed by Ms. Patricia Collette.
2. Households in the first monthly subsample were used for pretesting the procedures in the adolescent health study; thus, the first year of the adolescent study included monthly subsamples 2-13, the second year monthly subsamples 14-25.
3. The original sample listing for this project was done by hand directly from the files of the larger Harlem survey. As a safeguard against error in listing, when sample data from the larger survey became available on machine printouts, the handlisting was checked against the processed data; any cases which fell within the appropriate birthdates and had been missed earlier were then added to the lists. A small number of youngsters (25) were subsequently dropped from the sample because their ages were found to be beyond the limits set for this study.
4. The community survey had a completion rate of interviewing in occupied housing units in Central Harlem of 75 per cent during the first year (1967-68) and 70 per cent during the second year (1968-69). These completions provided the universe from which the sample for the adolescent project was drawn. Whether the households which were missed in the larger community survey might have presented more adolescent health problems than the successfully contacted households is conjectural. There is reason to believe that there were relatively fewer adolescents in the missed households because failure to complete an interview in that survey was more likely to be due to finding no one at home after numerous visits rather than to refusal. It seems likely for at least two reasons that the overall participation rate in the larger community survey did not affect proportionately the listing for the adolescent sample. Adolescents usually live in larger households, where there is a greater probability of finding someone home. Additionally, comparing the sex and marital status characteristics in the interviewed sample, there are indications that the larger sample may underrepresent men not living with their spouses. This is similar to the Census experience, which is that black men under age 35 are more likely to be undercounted than anyone else. For these reasons the rate of completion in the community survey can be assumed to be greater in households with adolescents than in some others.
5. Analysis has concentrated on this part of the sample because they are represented in sufficient numbers to draw reliable inferences. (See Appendix C for discussion of confidence limits.) The number of Spanish background youth was too small for separate analysis; the totals including these youth do not change much from those presented for black youth only. The 16-17 year old youths, included in only the second study year, are analyzed separately in Chapter XI for what they suggest about age trends in adolescence.